PUBLIC REVIEW DRAFT

BRANDENBURG MIXED USE PROJECT/ NORTH SAN PEDRO HOUSING SITES ENVIRONMENTAL IMPACT REPORT

STATE CLEARINGHOUSE #2003012046

(VOLUME 1 of 2)

GP03-03-01

August 2003

CITY OF SAN JOSE
CAPITAL OF SILICON VALLEY

Department of Planning, Building and Code Enforcement
STEPHEN M. HAASE, AICP, DIRECTOR

August 22, 2003

Ladies and Gentlemen:

SUBJECT: DRAFT ENVIRONMENTAL IMPACT REPORT FOR GENERAL PLAN AMENDMENT FILE NO. GP03-03-01 – STATE CLEARINGHOUSE NO. 2003012046

The Planning Commission of the City of San Jose will hold a Public Hearing to consider the Draft Environmental Impact Report (DEIR) prepared for the project described below. A copy of the DEIR is attached for your review.

Your comments regarding the significant environmental effects of this project and the adequacy of the DEIR are welcome. Written comments, submitted to the Department of Planning, Building and Code Enforcement by 5:00 p.m., **October 13, 2003**, will be included in the EIR and be considered by the Planning Commission at this public hearing. *If you make comments through a state or regional clearinghouse, please send a copy of your comments to the contact person listed below to insure prompt consideration.* If we receive no comments (nor a request for an extension of time) from you by the specified date, we will assume you have none to make.

Project Description and Location: DRAFT ENVIRONMENTAL IMPACT REPORT (EIR) for the Brandenburg Mixed Use/North San Pedro Housing Sites project for the development of approximately 60,000 square feet of commercial uses, approximately 1,500 residential units and the realignment of West Julian Street between North Market Street and West Saint James Street located generally east of State Route 87, south of the Union Pacific Railroad line, north of West St. James Street, and west of Market Street. The proposed project requires an amendment to the San Jose 2020 General Plan, rezoning, and associated land use permits, development agreements, acquisition and assembly of property, street abandonment and infrastructure improvements. Council District 3.

Tentative Hearing Date: November 17, 2003

Contact Person:
Susie Pineda or Ron Eddow
Department of Planning, Building & Code Enforcement
801 N. First Street, Room 400
San Jose, CA 95110

Sincerely,

Ron Eddow

Ron Eddow, Senior Planner

Attachment

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(VOLUME 1 of 2)

Submitted to the:

City of San Jose

Prepared by:

LSA Associates, Inc.

August 2003

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I. INTRODUCTION

A. PURPOSE OF THE EIR

In compliance with the California Environmental Quality Act (CEQA), this report describes the environmental consequences of the Brandenburg Mixed Use Project/North San Pedro Housing Sites (proposed project).

This Environmental Impact Report (EIR) is designed to fully inform City of San Jose decision-makers, other responsible agencies, and the general public of the proposed project and the potential consequences of its approval. This EIR also examines various alternatives to the proposed project, and recommends a set of mitigation measures to reduce or avoid potentially significant impacts. The City of San Jose is the lead agency for the environmental review of the proposed project. This EIR will be used by City of San Jose and Redevelopment Agency staff, the Planning Commission, the Redevelopment Agency Board, and the City Council in their review of the proposed project and the various approvals required as described in Chapter III, Project Description.

B. PROPOSED PROJECT

The proposed project consists of a group of related actions, including amendments to San Jose's General Plan, rezoning, and associated land use permits, development agreements between the Redevelopment Agency and various developers of the site, appropriate acquisition and assembly of property, street abandonment and infrastructure improvements including but not limited to streets, sidewalks, parks and other public spaces, water, sanitary sewer, and storm utilities and utility undergrounding. The development of approximately 60,000 square feet of commercial uses and approximately 1,500 residential units is also proposed for the project site.

Three General Plan amendments are proposed.

1. Land Use Changes

The San Jose Redevelopment Agency filed a General Plan Amendment that proposes to change the San Jose 2020 Land Use/Transportation Diagram for a 9-acre site (a subset of the 11.11-acre project area) from General Commercial on 6.2 acres, Combined Industrial/Commercial on 1-acre, and Residential Support for the Core Area (25+ du/acre) on 1.8-acres to Core Area.

2. Roadway Designation

The San Jose Redevelopment Agency proposes to realign Julian Street between Market and Saint James Streets, as part of the restoration of the city street grid.

3. Downtown Core Boundaries

The San Jose Redevelopment Agency proposes to amend the General Plan text to redefine the Downtown Core Area and Downtown Frame Area boundaries.

C. EIR SCOPE

On January 15, 2003, the City circulated a Notice of Preparation (NOP) to help identify the types of impacts that could result from the proposed project, as well as potential areas of controversy. The NOP was mailed to public agencies (including the State Clearinghouse) and neighborhood organizations considered likely to be interested in the proposed project and its potential impacts. Additionally, a community meeting/public scoping session was held on February 11, 2003, to introduce the proposed project and CEQA process. Comments received by the City on the NOP were taken into account during the preparation of this Draft EIR. The NOP, written comments, and the distribution list are provided in Appendix A.

This Draft EIR focuses on the areas of concern identified in the NOP, comments submitted on the NOP, and comments provided at the public scoping session. The following environmental topics are addressed in this EIR:

A. Land Use
B. Transportation and Circulation
C. Air Quality
D. Noise
E. Shade and Shadow
F. Aesthetics
G. Vegetation and Wildlife
H. Geology
I. Cultural Resources
J. Hazards and Hazardous Materials
K. Public Facilities and Services
L. Hydrology and Flooding
M. Utilities and Service Systems
N. Energy

D. REPORT ORGANIZATION

This EIR is organized into the following chapters:

- *Chapter I – Introduction*: Discusses the overall EIR purpose; provides a summary of the proposed action and environmental review process; identifies potentially significant issues and concerns; and summarizes the organization of the EIR.
- *Chapter II – Summary*: Provides a summary of the impacts that would result from implementation of the proposed project, and describes mitigation measures recommended to reduce or avoid significant impacts.
- *Chapter III – Project Description*: Provides a description of the project's objectives, location and site conditions, site development history, details of the project itself, required approval process, and uses of the EIR.
- *Chapter IV – Consistency with Plans and Policies*: Identifies relevant regional and local plans and evaluates the proposed project's consistency with these plans and policies.

- *Chapter V – Setting, Impacts and Mitigation Measures*: Describes the following for each environmental technical topic: existing conditions (setting); potential environmental impacts and their level of significance; and mitigation measures recommended to mitigate identified impacts. Potential adverse impacts are identified by levels of significance, as follows: less-than-significant impact (LTS), significant impact (S), and significant and unavoidable impact (SU). The significance of each impact is categorized before and after implementation of any recommended mitigation measure(s).
- *Chapter VI – Cumulative Impacts*: Provides the required analysis of potential environmental impacts that are individually limited, but cumulatively significant, resulting from the proposed project alone, or together with other projects.
- *Chapter VII – Alternatives*: Provides an evaluation of five alternatives to the proposed project, including the No Project Alternative.
- *Chapter VIII – Significant Effects Which Cannot Be Avoided*: Identifies any significant adverse impacts which, even after implementation of any and all recommended mitigation measures, would not be reduced to levels that would be less than significant.
- *Chapter IX – Growth-Inducing Impacts*: Discusses the ways in which the proposed project could foster economic or population growth, either directly or indirectly, in the surrounding environment.
- *Chapter X – Irreversible Environmental Changes*: Identifies any significant irreversible environmental changes that would be caused by the proposed project being analyzed. Irreversible environmental changes may include current or future commitments to the use of non-renewable resources, or secondary or growth-inducing impacts that commit future generations to similar uses.
- *Chapter XI – Authors and Consultants*: Identifies the authors and consultants involved in the preparation of this EIR.
- *Chapter XII – References and Contacts*: Provides a list of the reference documents, publications, and literature reviewed and cited, and identifies the persons and agencies contacted during report preparation.

II. SUMMARY

A. PROJECT UNDER REVIEW

This Draft EIR has been prepared to evaluate the environmental impacts of the Brandenburg Mixed Use Project/North San Pedro Housing Sites. The proposed project consists of a group of related actions, including amendments to San Jose's General Plan, rezoning, and associated land use permits, appropriate acquisition and assembly of property, street abandonment and improvements. The development of approximately 60,000 square feet of commercial uses and approximately 1,500 residential units is also proposed for the project site.

Three General Plan amendments are proposed.

1. Land Use Changes

The San Jose Redevelopment Agency proposes to change the Land Use/Transportation Diagram for a 9-acre site (a subset of the 11.11-acre project area) from General Commercial on 6.2 acres, Combined Industrial/Commercial on 1-acre, and Residential Support for the Core Area (25+ du/acre) on 1.8-acres to Core Area.

2. Roadway Designation

The San Jose Redevelopment Agency proposes to realign Julian Street between Market and Saint James Streets, as part of the restoration of the city street grid.

3. Downtown Core Boundaries

The San Jose Redevelopment Agency proposes to amend the General Plan text to redefine the Downtown Core Area and Downtown Frame Area boundaries to encompass the project site.

A more detailed description of the proposed project is provided in Chapter III, Project Description.

B. SUMMARY OF IMPACTS AND MITIGATION MEASURES

This summary provides an overview of the analysis contained in Chapter V, Setting, Impacts, and Mitigation Measures. CEQA requires a summary to include discussion of: 1) potential areas of controversy; 2) significant impacts; 3) cumulative impacts; 4) significant irreversible and unavoidable impacts; and 5) alternatives to the proposed project.

1. Potential Areas of Controversy

Letters received as comments on the Notice of Preparation (NOP) raised a number of topics that the writers wanted addressed in the EIR, including hydrology and flooding, airport safety and noise, air quality, electric and magnetic fields (EMFs), parking, transit operations, and traffic impacts. In

addition, some of the comments offered in the NOP comment letters address the merits of the project itself (and not the potential adverse environmental impacts that are the subject of this EIR).

Verbal comments offered by those in attendance at the CEQA Scoping Session, held on February 11, 2003, included many of those offered in writing as comments on the NOP, and also included requests that known and potential historic resources be considered. Several questions were raised and answered regarding aspects of the Redevelopment process. The current ongoing remediation of contaminated soils and groundwater on the site was also discussed.

While these topics of concern were raised through these two scoping processes (the NOP and the Scoping Session), designating them "controversial" would be a stretch. No one disputed the need for the EIR to evaluate these issues or the potential for each of them to result in impacts.

2. Significant Impacts

Under CEQA, a significant impact on the environment is defined as, "...a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance."[1] Implementation of the proposed project has the potential to result in adverse environmental impacts in several environmental areas. Impacts in the following areas would be significant without the implementation of mitigation measures, but would be reduced to a less-than-significant level if the mitigation measures noted in this report are implemented:

- land use
- transportation
- air quality
- noise
- vegetation and wildlife
- geology
- cultural resources
- hazards
- public facilities and services
- hydrology and flooding

3. Alternatives to the Proposed Project

Five alternatives to the proposed project are analyzed in Chapter V of this Draft EIR are:

The **No Development** alternative would involve the multi-parcel site remaining physically as it presently is. Structures on the site would remain in place and in use; parking lots would continue to be used. No new construction or expansion of pubic facilities would occur under this alternative. The proposal to realign Julian Street would not occur; traffic would continue to use the curving Julian Street segment as it traverses the site. Where onsite soils and groundwater contamination has led to

[1] Remy, Thomas, Moose, and Manley, *Guide to the California Environmental Quality Act*, 1999, p.158; Public Resources Code 15382; Public Resources Code 21068.

remediation activities, those activities would continue in the near term to their current objective. Further remediation efforts would not be initiated.

The **Alternate Location** alternative evaluates the same development program as the proposed project, but at another location within the City of San Jose. In order to most clearly distinguish the trade-off in potential impacts—both *beneficial* and *adverse*—of an alternate location for the project, a single site of approximately the same size has been selected. That site is the 14.5-acre Fruitdale Station site analyzed in the EIR prepared for the *Neighborhood Business Clusters Redevelopment Area Formation* (February 2000). The Fruitdale Station site is located south of the Southwest Expressway and Fruitdale Avenue, and west of St. Elizabeth Drive.

The **Retail Mix** alternative takes the proposed project and adds the option of a 40,000 square foot urban market to the development program.

The **Office/Residential Mix** alternative evaluates a project that includes both office and residential uses, like the proposed project that was analyzed in the previous EIR on the West Julian Revitalization Project (including the Legacy Partners office and retail project) in 2001.

The **No Project** (existing General Plan and Zoning) alternative evaluates the impacts of development that would be allowed under the existing General Plan land use designation and Zoning for the site.

4. Cumulative Impacts

Cumulative impacts have been identified in the topical areas of transportation and circulation, air quality, and noise.

5. Significant Unavoidable Impacts

As discussed in Chapter VIII of this EIR, implementation of the proposed project would result in the following significant unavoidable adverse impacts:

- Significant traffic level of service (LOS) impacts at the intersections of Coleman Avenue/ Hedding Street and Coleman Avenue/Taylor Street;
- Significant traffic impacts to two freeway segments of State Route 87; and
- Significant contributions to regional air pollution in the near term.

The project in conjunction with other foreseeable projects would also result in significant unavoidable cumulative impacts to transportation and circulation, air quality, and noise

C. SUMMARY TABLE

Information in Table II-1, Summary of Impacts and Mitigation Measures, has been organized to correspond with environmental issues discussed in Chapter V. The table is arranged in four columns: 1) impacts; 2) level of significance prior to mitigation; 3) mitigation measures; and 4) level of significance after mitigation. Levels of significance are categorized as follows: SU = Significant and Unavoidable; S = Significant; and LTS = Less Than Significant. A series of mitigation measures is noted where more than one mitigation measure is required to achieve a less-than-significant impact,

and alternative mitigation measures are identified when available. For a complete description of potential impacts and recommended mitigation measures, please refer to the specific discussions in Chapter V.

Table II-1: Summary of Impacts and Mitigation Measures

Environmental Impacts	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
A. LAND USE			
LU-1: The introduction of new buildings on 14 of the 16 parcels composing the project site, at heights of up to 173 feet above ground level, has the potential to result in light spillover onto adjacent properties and increased reflected glare.	S	LU-1a: The City shall continue to implement the following 2020 General Plan goals and policies that relate to the land use compatibility aspects of light and glare: • New Residential development should be oriented and designed to protect residents from any potential conflicts with adjacent land uses. • *Urban Design Policy 1* – The City should continue to apply strong architectural and site controls on all types of development for the protection and development of neighborhood character and for the proper transition between areas with different types of land uses. • *Urban Design Policy 22* – Design guidelines adopted by the City Council should be followed in the design of development projects. LU-1b: The City shall continue to implement Council Policy 4-3 which encourages the use of low-pressure sodium lighting for outdoor uses.	LTS
LU-2: Developing housing near the two elevated roadways and adjacent to the railroad line could expose future residents to land use incompatibilities.	S	LU-2: The City shall continue to implement the following 2020 General Plan goals and policies that relate to the land use compatibility and design aspects of nearby roads, freeways and railroad rights-of-way: • New Residential development should be oriented and designed to protect residents from any potential conflicts with adjacent land uses.	LTS

Key: SU = Significant and Unavoidable; S = Significant; LTS = Less-Than-Significant

Table II-1 *continued*

Environmental Impacts	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
LU-2 *continued*		• *Urban Design Policy 1* – The City should continue to apply strong architectural and site controls on all types of development for the protection and development of neighborhood character and for the proper transition between areas with different types of land uses. • *Urban Design Policy 22* – Design guidelines adopted by the City Council should be followed in the design of development projects. • *Parks and Recreation Policy 2* – Public parks, open space lands and other similar public areas should be located, oriented and designed in such a way as to facilitate their security and policing.	
LU-3: Construction of buildings at heights that would exceed the FAA's imaginary surface restriction of 208 feet above mean sea level (which includes any buildings reaching 173 feet above ground level) could result in hazards to safe operation of the San Jose International Airport.	S	LU-3: Prior to the issuance of a building permit for any project structures that would exceed the FAA imaginary surface applicable to the project site, the following actions should be accomplished • The applicant shall comply with the notification requirements of Federal Aviation Regulations, Part 77, and receive a "Determination of No Hazard" from the FAA. • Conditions set forth in the required FAA determination of No Hazard regarding roof-top lighting or marking shall be incorporated into the final design of the structure. • Avigation easements (recognizing that the property is subject to aircraft noise impacts and specified height restrictions) shall be dedicated to the City of San Jose.	LTS
B. TRANSPORTATION AND CIRCULATION			
TRANS-1: The intersections of Coleman Avenue and Hedding Street and Coleman Avenue and Taylor Street would continue to experience unacceptable levels of service.	S	TRANS-1: Mitigation for the impacts at the intersections of Coleman/Hedding and Coleman/Taylor would be to widen Coleman Avenue to six lanes, south of I-880. However, an improvement of this magnitude is beyond the financial capability of this development. Therefore, these intersection impacts should be considered significant and unavoidable.	SU
TRANS-2: The peak-hour volume warrant would be satisfied at two of the unsignalized intersections (Terraine Street and Devine Street, and Market Street and Devine Street).	S	TRANS-2: At the time that a specific development project is proposed, the City shall ensure that signals are constructed at Terraine Street and Devine Street, and Market Street and Devine Street.	LTS

Key: SU = Significant and Unavoidable; S = Significant; LTS = Less-Than-Significant

Table II-1 *continued*

Environmental Impacts	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
TRANS-3: State Route 87 would experience a significant impact from project traffic along two of the analyzed segments.	S	TRANS-3: The mitigation necessary to reduce impacts upon these freeway segments to less-than-significant levels is the widening of the freeway. However, widening is not considered feasible because of significant right-of-way acquisition with many homes and businesses that would need to be demolished. These impacts are therefore considered significant and unavoidable.	SU
C. AIR QUALITY			
AQ-1: Demolition and construction period activities could generate significant dust, exhaust, and organic emissions.	S	AQ-1: Consistent with guidance from the BAAQMD, the following measures shall be required of construction contracts and specifications for the project. *Demolition.* The following controls shall be implemented during demolition: • Watering should be used to control dust generation during demolition of structures and break-up of pavement. • Cover all trucks hauling demolition debris from the site. • Use dust-proof chutes to load debris into trucks whenever feasible. *Construction.* The following controls shall be implemented at all construction sites: • Water all active construction areas at least twice daily and more often during windy periods; active areas adjacent to existing land uses shall be kept damp at all times, or shall be treated with non-toxic stabilizers or dust palliatives; • Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least 2 feet of freeboard; • Pave, apply water three times daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas, and staging areas at construction sites;	LTS

Key: SU = Significant and Unavoidable; S = Significant; LTS = Less-Than-Significant

Table II-1 *continued*

Environmental Impacts	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
AQ-1 *continued*		• Sweep daily (with water sweepers) all paved access roads, parking areas, and staging areas at construction sites; water sweepers shall vacuum up excess water to avoid runoff-related impacts to water quality; • Sweep streets daily (with water sweepers) if visible soil material is carried onto adjacent public streets; • Apply non-toxic soil stabilizers to inactive construction areas; • Enclose, cover, water twice daily, or apply non-toxic soil binders to exposed stockpiles (dirt, sand, etc.); • Limit traffic speeds on unpaved roads to 15 mph; • Install sandbags or other erosion control measures to prevent silt runoff to public roadways; • Replant vegetation in disturbed areas as quickly as possible. • Install wheel washers for all exiting trucks, or wash off the tires or tracks of all trucks and equipment leaving the site; and • Suspend excavation and grading activity when winds (instantaneous gusts) exceed 25 mph. Implementation of these mitigation measures would reduce construction period air quality impacts to a less-than-significant level.	
AQ-2: Project-related regional emissions would exceed the BAAQMD thresholds of significance for ozone precursors.	S	AQ-2: The *BAAQMD CEQA Guidelines* document identifies potential mitigation measures for various types of projects. The following are considered to be feasible and effective in further reducing vehicle trip generation and resulting emissions from the project: • Provide neighborhood-serving shops and services within or adjacent to residential development. • Provide transit facilities (e.g., bus bulbs/turnouts, benches, shelters). • Provide shuttle service to regional transit system or multimodal center.	SU

Key: SU = Significant and Unavoidable; S = Significant; LTS = Less-Than-Significant

Table II-1 *continued*

Environmental Impacts	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
AQ-2 *continued*		• Provide shuttle service to major destinations such as employment centers, shopping centers and schools. • Provide bicycle land and/or paths, connected to community-wide network. • Provide sidewalks and/or paths, connected to adjacent land uses, transit stops, and/or community-wide network. • Provide satellite telecommunication centers in large residential developments. • Provide secure and conveniently located bicycle and storage for residents. • Wire each housing unit to allow use of emerging electronic communication technology. • Implement feasible TDM measures including a ride-matching program, coordination with regional ridesharing organizations and provision of transit information.	
D. NOISE			
NOI-1: Aircraft noise levels would represent a significant adverse impact on project residents and park users.	S	NOI-1a: The following policies contained in the City's 2020 General Plan serve to reduce significant noise impacts: • Noise Policy 1: The City's acceptable noise level objectives are 55 dBA Ldn as the long-range exterior noise quality level, 60 dBA L_{dn} as the short-range exterior noise quality level, 45 dBA L_{dn} as the interior noise quality level, and 76 dBA L_{dn} as the maximum exterior noise level necessary to avoid significant adverse health effects. These objectives are established for the City, recognizing that the attainment of exterior noise quality levels in the environs of the San Jose International Airport, the Downtown Core Area, and along major roadways may not be achieved. To achieve the noise objectives, the City should require appropriate site and building design, building construction, and noise attenuation techniques in new residential development.	LTS

Key: SU = Significant and Unavoidable; S = Significant; LTS = Less-Than-Significant

Table II-1 *continued*

Environmental Impacts	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
NOI-1 *continued*		• Noise Policy 8: The City should discourage the use of outdoor appliances, air conditioners, and other consumer products that generate noise levels in excess of the City's exterior noise standards. • Noise Policy 9: Construction operations should use available noise suppression devices and techniques. • Noise Policy 11: When located adjacent to existing or planned noise sensitive residential land or public/quasi-public land use, nonresidential land uses should mitigate noise generation to meet the 55 dBA L_{dn} guidelines at the property line. • Urban Design Policy 1: The City should continue to apply strong architectural and site design controls on all types of development for the protection and development of neighborhood character and for the proper transition between areas with different types of land uses. • Urban Design Policy 21: To promote safety and minimize noise impacts in residential and working environments, development that is proposed adjacent to railroad lines should be designed to provide the maximum separation between the rail line and dwelling units, yards, or common open space areas; offices and other job locations; facilities for the storage of toxic or explosive materials; and the like. To the extent possible, areas of development closest to an adjacent railroad line should be devoted to parking lots, public streets, peripheral landscaping, the storage of nonhazardous materials, and so forth. • Urban Design Policy 22: Design guidelines adopted by the City Council should be followed in the design of development projects.	

Key: SU = Significant and Unavoidable; S = Significant; LTS = Less-Than-Significant

Table II-1 *continued*

Environmental Impacts	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
NOI-1 *continued*		NOI-1b: Implementation of the City of San Jose's Residential Design Guidelines and Commercial Design Guidelines by the City, the Redevelopment Agency, or individual property owners, as applicable, would help ensure that new development is compatible with existing and planned land uses. Potential impacts resulting from conflicts between future housing and adjacent commercial development and the railroad would be reduced through site-specific design measures such as setbacks, landscape buffers, noise attenuation, building orientations, and appropriate design features to screen incompatible uses. As indicated in Urban Design Policy 22, above, adherence to these policies is encouraged by the General Plan. At the time future residential projects are proposed, the following measures shall be required: • Preparation of a site-specific noise analysis by an acoustical consultant to determine specific design measures to reduce interior noise levels to conform to State Title 24 requirements. An outside-to-inside noise level reduction of at least 20 dBA should be used as a basis for achieving an interior noise level of 45 dBA L_{dn}. Design features that may be required could include the following: (1) use of sound-rated windows and exterior doors, (2) chimney caps on fireplaces, (3) stucco or cement plaster exterior construction as opposed to wood siding, and (4) air-conditioning or mechanical ventilation so that windows and door may remain closed. • In order to reduce aircraft-related noise impacts, outdoor activity areas (e.g., patios, balconies, common recreation areas) should be situated as much as possible on the east side of buildings so that the residential structures could provide some noise shielding. • Train noise impacts could be reduced by the construction of a sound wall, building orientation, building noise attenuation, and mechanical ventilation systems to reduce interior noise levels to acceptable levels.	

Key: SU = Significant and Unavoidable; S = Significant; LTS = Less-Than-Significant

Table II-1 *continued*

Environmental Impacts	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
NOI-1 *continued*		NOI-1c: Prior to the issuance of building permits for development, the property owner(s) shall grant an avigation easement to the City of San Jose (in compliance with the ALUC Plan and City General Plan Aviation Policy #40), providing for acceptance of aircraft noise impacts.	
NOI-2: Whereas project-generated traffic noise would not represent a significant impact, the effect of existing and future traffic noise on project use would be significant.	S	NOI-2a: In the event that the proposed housing units are designed to include outdoor active uses, such as patios, backyards, or balconies, the following areas would require some form of sound attenuation feature in order to meet the City's short-range 60 dBA CNEL exterior noise standard. • Within 77 feet of Terraine Street centerline for Parcels A, B, C, D, and G • Within 99 feet of Terraine Street centerline for Parcel J • Within 55 feet of San Pedro Street centerline for Parcels K, L1, and L2 • Within 294 feet of Market Street centerline for Parcels F and H • Within 305 feet of Market Street centerline for Parcels L1 and L2 • Within 277 feet of Julian Street centerline for Parcel G • Within 82 feet of Julian Street centerline for Parcels J, K, and N • Within 133 feet of Julian Street centerline for Parcels H and L1 • Within 1,214 feet of SR 87 centerline for Parcels A, C, G, J, and M	LTS
		NOI-2b: All proposed residential buildings within the areas listed above would require air-conditioning systems to meet the City's short-range 60 dBA CNEL exterior noise standard.	

Key: SU = Significant and Unavoidable; S = Significant; LTS = Less-Than-Significant

Table II-1 *continued*

Environmental Impacts	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
NOI-2 *continued*		NOI-2c: Development in the following areas that would experience traffic noise exceeding 70 dBA CNEL would require additional building facade upgrades, such as double-paned windows with a minimum sound transmission class (STC) rating of STC-30, which is higher than what the standard residential construction provides: • Within 68 feet of Market Street centerline for Parcels F and H • Within 70 feet of Market Street centerline for Parcels L1 and L2 • Within 64 feet of Julian Street centerline for Parcel G • Within 264 feet of SR 87 centerline for Parcels A, C, and G	
NOI-3: Construction period activities could create significant short-term noise impacts.	S	NOI-3: Implementation of the following multi-part measure would reduce potential construction period noise impacts to less-than-significant levels: • Construction activities will be limited to daytime hours (7 a.m. to 7 p.m. weekdays) for any construction within 500 feet of a residence. • All internal combustion engines for construction equipment used on the site will be properly muffled and maintained. • In the event that pile driving is proposed, nearby residents will be notified of the schedule for its use while it is in use. Portable acoustical barriers will be installed around pile driving equipment. • A name, address, and phone number of a contact person will be posted on the site to handle noise complaints. • Unnecessary idling of internal combustion engines will be prohibited. • All stationary noise generating construction equipment, such as air compressors and portable power generators, will be located as far as practical from existing residences.	LTS
E SHADE AND SHADOW			
No significant adverse impacts related to aesthetics would result from the proposed project			

Key: SU = Significant and Unavoidable; S = Significant; LTS = Less-Than-Significant

Table II-1 *continued*

Environmental Impacts	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
F. AESTHETICS			
No significant adverse impacts related to aesthetics would result from the proposed project			
G. VEGETATION AND WILDLIFE			
VEG-1: Construction of the proposed project would result in the removal of existing mature trees.	S	VEG-1: For trees that cannot be incorporated into new landscaping, a City of San Jose Tree Removal Permit shall be obtained prior to removal of trees from the site. Loss of ordinance size trees will be mitigated by implementation of landscaping plans approved by the City of San Jose, in conformance with the City of San Jose landscaping guidelines and City of San Jose Planning Department specifications. The City of San Jose requires tree replacement for those trees greater than 18 inches in diameter at a ratio of 4:1 (trees planted to trees removed).	LTS
H. GEOLOGY			
GEO-1: Occupants of the project, dwelling units, and commercial space would be subject to seismic hazards.	S	GEO-1: Prior to the issuance of any site-specific grading or building permits, a design-level geotechnical investigation shall be prepared and submitted to the City of San Jose Public Works Department for review and confirmation that the proposed development fully complies with the California Building Code. The report shall determine the project site's surface geotechnical conditions and address potential seismic hazards such as liquefaction and subsidence. The report shall identify building techniques appropriate to minimize seismic damage. In addition, the following requirement for the geotechnical and soils report shall be met: • Analysis presented in the geotechnical report shall conform with the California Division of Mines and Geology recommendations presented in the "Guidelines for Evaluating Seismic Hazards in California." All mitigation measures, design criteria, and specifications set forth in the geotechnical and soils report shall be followed.	LTS

Key: SU = Significant and Unavoidable; S = Significant; LTS = Less-Than-Significant

Table II-1 *continued*

Environmental Impacts	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
GEO-1 *continued*		It is acknowledged that seismic hazards cannot be completely eliminated even with site-specific geotechnical investigation and advanced building practices (as provided in the mitigation measure above). However, exposure to seismic hazards is a generally accepted part of living in the San Francisco Bay Area and therefore the mitigation measures described above reduces the potential hazards associated with seismic activity to a less-than-significant level.	
GEO-2: Damage to structures or property related shrink-swell potential and/or settlements of project soils could occur.	S	GEO-2: In locations underlain by expansive soils and/or non-engineered fill, the designers of proposed building foundations and improvements (including sidewalks, roads, and utilities) shall consider these conditions. The design-level geotechnical investigation (required by Mitigation Measure GEO-1) shall include measures to ensure that potential damage related to expansive soils and non-uniformly compacted fill are minimized. Options to address these conditions may range from removal of the problematic soils and replacement, as needed, with properly conditioned and compacted fill, to design and construction of improvements to withstand the forces exerted during the expected shrink-swell cycles and settlements.	LTS
GEO-3: Dewatering-related subsidence and potential earth movements associated with the temporary shoring systems could cause settlement and damage to existing structures, roadways, and/or utilities.	S	GEO-3: The design-level geotechnical investigation (required by Mitigation Measure GEO-1) shall evaluate the consolidation properties of the underlying sediments to determine the potential for settlements associated with dewatering and other potential earth movements. If it is determine that unacceptable settlements may occur with either active or passive dewatering systems, then alternative groundwater control systems that do not require continuous groundwater removal (e.g. slurry wall) shall be required.	LTS

Key: SU = Significant and Unavoidable; S = Significant; LTS = Less-Than-Significant

Table II-1 *continued*

Environmental Impacts	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
I. CULTURAL RESOURCES			
CUL-1: Development of residential and commercial uses of the project site could adversely impact cultural resources.	S	CUL-1a: A qualified archaeologist, meeting the Professional Qualifications Standards of the *Secretary of the Interior's Standards and Guidelines*, shall monitor all ground disturbing activity within the project area. This monitoring shall continue until, in the archaeologist's judgment, a depth has been reached at which cultural resources are not likely to be encountered by project-related activities. If deposits of archaeological materials are encountered during project activities, all work within 50 feet of the discovery shall be redirected until the monitor has evaluated the finds and made recommendations regarding their disposition. If such cultural resources are found to be significant, in accordance with CEQA and the California Register, they should be avoided by project activities. If avoidance is not feasible, adverse effects to such resources shall be mitigated. Prehistoric materials can include flaked-stone tools (e.g. projectile points, knives, choppers) or obsidian, chert, or quartzite toolmaking debris; culturally darkened soil (i.e., midden soil often containing heat affected rock, ash and charcoal, shellfish remains, and cultural materials); and stone milling equipment (e.g., mortars, pestles, handstones). Historical materials can include wood, stone, concrete, or adobe footings, walls and other structural remains; debris-filled wells or privies; and deposits of wood, glass, ceramics, and other refuse. Project personnel shall not collect or move any cultural material. Fill soils that may be used for construction purposes shall not contain archaeological materials. Upon completion of archaeological monitoring, a report shall be prepared documenting the methods, results, and recommendations of the monitoring archaeologist. The implementation of these mitigation measures will reduce the potential impacts to cultural resources.	LTS

Key: SU = Significant and Unavoidable; S = Significant; LTS = Less-Than-Significant

Table II-1 *continued*

Environmental Impacts	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
CUL-1 *continued*		CUL-1b: Prior to construction activities in parcels L1/L2, K, J, and M, a qualified structural engineer shall conduct a study of the building at 151 West St. James Street to identify any structural problems that may exist and that may be exacerbated by project-related vibration. If such structural problems are identified, a structural engineer, in conjunction with a qualified architectural historian meeting the professional qualifications standards of the Secretary of the Interior's Standards and Guidelines, shall develop a plan for the prevention or reduction of potential vibration damage to the building at 151 West St. James Street. If no structural problems exist with the building at 151 West St. James Street, the structural engineer shall (1) determine baseline limits to establish an acceptable range of vibration levels that may result from project-related construction; (2) install vibration sensors on the building at 151 West St. James Street before the start of project-related construction within the identified parcels (L1/L2, K, J, and M); and (3) monitor sensor data during project construction within the identified parcels to identify project-related vibration that exceeds the baseline limits. If baseline vibration limits are exceeded due to project-related construction, all construction in parcels L1/L2, J, K, and M shall halt while a structural engineer determines if damage has occurred to the building. Damage could include, but would not be limited to, positional movement, loss of structural integrity, and loss of contributing decorative elements (e.g., decorative moldings or carved wood panels). If damage has occurred as a result of project activities, the source of the vibration shall be identified and removed, and an architectural historian shall then develop, in conjunction with structural engineers, a treatment plan for repairing the vibration damage and preventing further damage to elements of the building that contribute to its historical significance and integrity. If a vibration damage treatment or prevention plan is required, the architectural historian shall prepare a report documenting the methods and findings of the plan. This report shall be submitted to the NWIC, the Director of Planning, Building and Code Enforcement, and the Historic Preservation Officer of the City of San Jose.	LTS

Key: SU = Significant and Unavoidable; S = Significant; LTS = Less-Than-Significant

Table II-1 *continued*

Environmental Impacts	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
CUL-1 *continued*		CUL-1c: Applications for development within the project area shall be referred to the Historic Landmarks Commission prior to approval. CUL-1d: If human remains are encountered during construction, work within 50 feet of the discovery should be redirected and the County Coroner notified immediately. At the same time, an archaeologist should be contacted to evaluate the situation. If the human remains are of Native American origin, the Coroner must notify the Native American Heritage Commission within 24 hours of this identification. The Native American Heritage Commission will identify a Native American Most Likely Descendent to inspect the site and provide recommendations for the proper treatment of the remains and associated grave goods. If human remains are encountered during construction, the archaeologist contracted to evaluate the situation should prepare a report documenting the methods and findings of the investigation. This report should be submitted to the NWIC.	
J. HAZARDS			
HAZMAT-1: Development of the project could expose construction workers and/or the public to hazardous materials from known residual soil and groundwater contamination or previously undiscovered contamination during construction activities.	S	HAZMAT-1a: Prior to the issuance of any grading, demolition, or building permits for the project, a Site Safety Plan/Soil and Groundwater Management Plan (Plan) should be prepared. At a minimum, the Plan should establish soil and groundwater mitigation and control specifications for grading and construction activities, including health and safety provisions for monitoring exposure to construction workers, procedures to be undertaken in the event that previously unreported contamination is discovered, and emergency procedures and responsible personnel. The Plan should also include procedures for managing soils and groundwater removed from the site to ensure that any excavated soils and/or dewatered groundwater with contaminants are stored, managed, and disposed of in accordance with applicable regulations.	LTS

Key: SU = Significant and Unavoidable; S = Significant; LTS = Less-Than-Significant

Table II-1 *continued*

Environmental Impacts	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
HAZMAT-1 *continued*		HAZMAT-1b: Prior to the issuance of any grading, demolition, or building permits at properties where Phase I activities have identified a potential hazardous materials issue that has not yet been evaluated in a Phase II investigation, a subsurface investigation should be conducted at the project site by a qualified environmental professional, in accordance with recommendations in the Brown and Caldwell summary report. Properties (and landowners) where the summary report recommended an additional Phase II investigation include • 229-249 Bassett Street (State of California) • 201-225 Bassett Street (Brandenburg) • 199 Bassett Street (Trenka) • 361 North San Pedro Street (Leon) • Union Pacific Railroad Company Property • 331-341 Terraine Street (State of California) If significant releases of hazardous materials are discovered during Phase II activities, additional investigation, remediation, and/or coordination with regulatory agencies may be required prior to redevelopment of the parcels. Implementation of this three-part measure would reduce this impact to a less-than-significant level.	
HAZMAT-2: Development at sites currently under remediation could expose future residents and workers to hazardous concentrations of contaminants and/or could hinder remedial activities.	S	HAZMAT-2a: Prior to the issuance of any permits for grading, demolition, or construction at the 153 West Julian Street property, the City shall require certification of completion of the remedial action required by RWQCB Order 99-088. HAZMAT-2b: Prior to the issuance of permits for grading, demolition, or construction at the 129-149 West Julian and 355 North San Pedro properties, the City shall require certification of completion of the Corrective Action Plans for those sites by RWQCB. Implementation of these measures would reduce this impact to a less-than-significant level.	LTS

Key: SU = Significant and Unavoidable; S = Significant; LTS = Less-Than-Significant

Table II-1 *continued*

Environmental Impacts	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
HAZMAT-3: Improper use or transport of hazardous materials during construction activities could result in releases affecting construction workers and the general public.	S	HAZMAT-3: A Site Safety Plan/Soil and Groundwater Management Plan should be prepared, which will address emergency procedures and the management and disposal of contaminated soils and groundwater (see Mitigation Measure HAZMAT-1a, above). Use, storage, disposal, and transport of hazardous materials during construction activities shall be performed in accordance with existing local, State, and federal hazardous materials regulations. No additional mitigation is required. Implementation of this measure would reduce this impact to a less-than-significant level.	LTS
HAZMAT-4: Demolition of any buildings containing lead-based paint and asbestos-containing building materials could release airborne lead and asbestos particles, which may affect construction workers and the public.	S	HAZMAT-4: As a condition of approval for any demolition or permit for a structure known or suspected to have been constructed prior to 1985, an asbestos and lead-based paint survey should be performed. If asbestos-containing materials are determined to be present, the materials should be abated by a certified asbestos abatement contractor in accordance with the regulations and notification requirements of the Bay Area Air Quality Management District. If lead-based paint are identified, then federal and State construction worker health and safety regulations should be followed during renovation or demolition activities. If loose or peeling lead-based paint are identified, they should be removed by a qualified lead abatement contractor and disposed of in accordance with existing hazardous waste regulations. Implementation of this measure would reduce this impact to a less-than-significant level.	LTS

Key: SU = Significant and Unavoidable; S = Significant; LTS = Less-Than-Significant

Table II-1 *continued*

Environmental Impacts	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
K. PUBLIC FACILITIES AND SERVICES			
SVCS-1: The increasing traffic congestion that the downtown area will face in coming years could adversely affect the ability of both the Police Department and the Fire Department to respond in a timely manner to emergency calls.	S	SVCS-1a: The City shall continue to implement the following 2020 General Plan goals and policies that relate to public facilities and services: • *Other Services Policy 18* – Fire service facilities should be located so that essential services can be most efficiently provided. • *Fire Hazards Policy 2* – All new development should be constructed at a minimum, to the fire safety standards contained in the San Jose Building Code. • *Fire Hazards Policy 3* – Anticipated fire response times and fire flow should be taken into consideration as part of the Development Review process. • *Fire Hazards Policy 6* – New development should provide adequate access for emergency vehicles, particularly fire fighting equipment, as well as provide secure evacuation routes for the inhabitants of the area.	LTS
		SVCS-1b: The City should implement a system of signal light preemption by emergency vehicles along key emergency response travel routes so as to expedite emergency through the Downtown Core Area.	
L. HYDROLOGY AND FLOODING			
HYD-1: Construction activities and post-construction operation of the project could result in degradation of water quality in the Guadalupe River and the Bay by reducing the quality of storm water runoff.	S	HYD-1: The applicant shall prepare a Storm Water Pollution Prevention Plan (SWPPP) designed to reduce potential impacts to surface water quality through the construction and life of the project. The SWPPP would act as the overall program document designed to provide measures to mitigate potential water quality impacts associated with implementation of the project. The SWPPP shall include:	LTS

Key: SU = Significant and Unavoidable; S = Significant; LTS = Less-Than-Significant

Table II-1 *continued*

Environmental Impacts	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
HYD-1 *continued*		• **Specific and detailed BMPs designed to mitigate construction-related pollutants.** These controls shall include practices to minimize the contact of construction materials, equipment, and maintenance supplies (e.g., fuels, lubricants, paints, solvents, adhesives) with storm water. The SWPPP shall specify properly designed centralized storage areas that keep these materials out of the rain. An important component of the storm water quality protection effort will be the education of the site supervisors and workers. To educate on-site personnel and maintain awareness of the importance of storm water quality protection, site supervisors shall conduct regular tailgate meetings to discuss pollution prevention. The frequency of the meetings and required personnel attendance list shall be specified in the SWPPP. The SWPPP shall specify a monitoring program to be implemented by the construction site supervisor, and must include both dry and wet weather inspections. City of San Jose and RWQCB personnel may make unannounced site inspections and are empowered to levy considerable fines if it is determined that the SWPPP has not been properly prepared and implemented.	

Key: SU = Significant and Unavoidable; S = Significant; LTS = Less-Than-Significant

Table II-1 *continued*

Environmental Impacts	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
HYD-1 *continued*		Best Management Practices (BMPs) designed to reduce erosion of exposed soil may include, but are not limited to: soil stabilization controls, watering for dust control, perimeter silt fences, placement of hay bales, and sediment basins. The potential for erosion is generally increased when grading occurs during the rainy season, as disturbed soil can be exposed to rainfall and storm runoff. If grading must be conducted during the rainy season, the primary BMPs selected shall focus on erosion control, that is, keeping sediment on the site. End-of-pipe sediment control measures (e.g., basins and traps) shall be used only as secondary measures. Access to and egress from the construction site shall be carefully controlled to minimize off-site tracking of sediment (this BMP is particularly important since much of the earthwork will involve loading trucks for off-site transport of soil excavated or the below-ground parking structures). Vehicle and equipment wash down facilities shall be designed to be accessible and functional both during dry and wet conditions. • **Measures designed to mitigate post construction-related pollutants.** The project shall include measures designed to mitigate potential water quality degradation of runoff from all portions of the completed development, including roof and sidewalk runoff. The final design team for the project should review *Start at the Source*, Design Guidance Manual for Storm-water Quality Protection. The selected permanent stormwater treatment measures may include biofilters and grassy swales; and the selected measure must meet the hydraulic sizing criteria specified in the most current NPDES municipal stormwater per-mit issued to the City of San Jose, unless the developer demon-strates that it is impracticable to meet the criteria; and the project includes an alternative method for treating an equivalent pollu-tant loading or quantity of stormwater runoff, or provides ano-ther equivalent water quality benefit. Implementation of this mitigation measure would reduce this impact to a less-than-significant level.	

Key: SU = Significant and Unavoidable; S = Significant; LTS = Less-Than-Significant

Table II-1 *continued*

Environmental Impacts	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
HYD-2: Portions of the project site are located in the 100-year flood hazard zone and could be inundated during extreme storm events, potentially flooding below-ground parking structures.	S	HYD-2: All structures shall be built so that potential injuries to project occupants and property damage are minimized in the event of a flood. Specifically, and in accordance with the San Jose Municipal Code, Title 17, Chapter 17.08, the lowest finished floor of each structure shall be elevated to or above the inundation elevation specified on the Flood Insurance Rate Map. In addition, below-ground parking structures shall be designed and constructed so that the base flood would not inundate these areas. Flood protection of below-ground parking could be achieved either by grade control and/or berms. Note: Below grade parking is only allowed in FEMA 100-year flood hazard zones if the structure above the below grade parking is 100 percent non-residential (in use) or mixed use (residential and non-residential). This project is 100 percent residential (in use) and the outcome of the upcoming Santa Clara County Water District (SCVWD) Interim Designation Letter of Map Revision from Zone AH to Zone A99 will determine if any below grade parking will be allowed. Implementation of this mitigation measure would reduce this impact to a less-than-significant level.	LTS
HYD-3: The below-ground parking structures associated with the residential-only development proposed for parcels A, B, C, and D would not comply with the City Special Flood Hazard Regulations.	S	HYD-3a: The proposed residential-only use for parcels A, B, C and D shall be allowed only after designation as Zone A99 by FEMA, which carries no elevation requirement in anticipation of a pending map change to the existing floodplain and after adoption of the Zone A99 designation into the City of San Jose's Special Flood Hazard Ordinance, flood proofing requirements shall be in accordance with the ordinance. Otherwise only commercial uses shall be allowed on the ground floor with flood proofing per City of San Jose Special Flood Hazard Ordinance requirements.	
		HYD-3b: No building permit shall be issued for the proposed construction on parcels A,B,C and D prior to designation as Zone A99 of these parcels by FEMA and adoption of the Zone A99 designation into the Special Flood Hazard Ordinance or the approval of a Letter of Map Revision by FEMA that shows that the specified parcels are no longer in the FEMA 100-year flood hazard zone.	

Key: SU = Significant and Unavoidable; S = Significant; LTS = Less-Than-Significant

Table II-1 *continued*

Environmental Impacts	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
HYD-4: Dewatering effluent may contain contaminants and if not properly managed could cause impacts to construction workers and the environment.	S	HYD-4: The SWPPP shall include provisions for the proper management of dewatering effluent. At minimum, all dewatering effluent will be contained prior to discharge to allow the sediment to settle out, and filtered, if necessary, to ensure that only clear water is discharged to the storm or sanitary sewer system. In areas of suspected groundwater contamination (i.e., underlain by fill or near sites where chemical releases are known or suspected to have occurred), groundwater will be analyzed by a State-certified laboratory for the suspected pollutants prior to discharge. Based on the results of the analytical testing, the applicant will work with the RWQCB and/or the local wastewater treatment plant to determine appropriate disposal options. Implementation of this mitigation measure would reduce this impact to a less-than-significant level.	LTS
M. UTILITIES AND SERVICE SYSTEMS			
No significant adverse impacts related to utilities and service systems would result from the proposed project			
N. ENERGY			
No significant adverse impacts related to energy would result from the proposed project			

Source: LSA Associates, Inc., 2003.

Key: SU = Significant and Unavoidable; S = Significant; LTS = Less-Than-Significant

III. PROJECT DESCRIPTION

A. OVERVIEW OF THE PROPOSED PROJECT

The proposed project consists of a group of related actions, including amendments to San Jose's General Plan, rezoning, and associated land use permits, appropriate acquisition and assembly of property, street abandonment and improvements. The development of approximately 60,000 square feet of commercial uses and approximately 1,500 residential units is also proposed for the project site.

B. PROJECT OBJECTIVES

The following list summarizes the objectives of the proposed project:

- Realign Julian Street to follow the historic rectangular grid street system;
- Assemble properties to facilitate development;
- Develop high density residential uses in and adjacent to the Downtown;
- Provide high quality residential development and adequate parking facilities in an underutilized area of Downtown San Jose; and
- Provide new open-public space with recreational facilities with the project boundaries.

C. PROJECT LOCATION

As shown in Figure III-1, the project site is located within the City of San Jose, in Santa Clara County. The project site is generally situated in downtown San Jose east of State Route 87 (SR 87), south of the Union Pacific Railroad line, north of West St. James Street, and west of Market Street, as shown in Figure III-2. The multi-block project site is approximately 11 acres in size.

D. PROJECT BACKGROUND

In April of 2001, this same general area was the subject of a Draft EIR for General Plan amendments, public improvements, and the private development of a mixed use project known as the Legacy Partners project.[1] A Draft EIR evaluating the potential impacts of those proposals was prepared and circulated for public review from April 25, 2001 to June 11, 2001.[2] Comment letters were received from numerous agencies, organizations and individuals with an interest in the proposed project. However, the project was withdrawn shortly thereafter and a Final EIR (including responses to the submitted comments and revisions to the Draft EIR) was never prepared.

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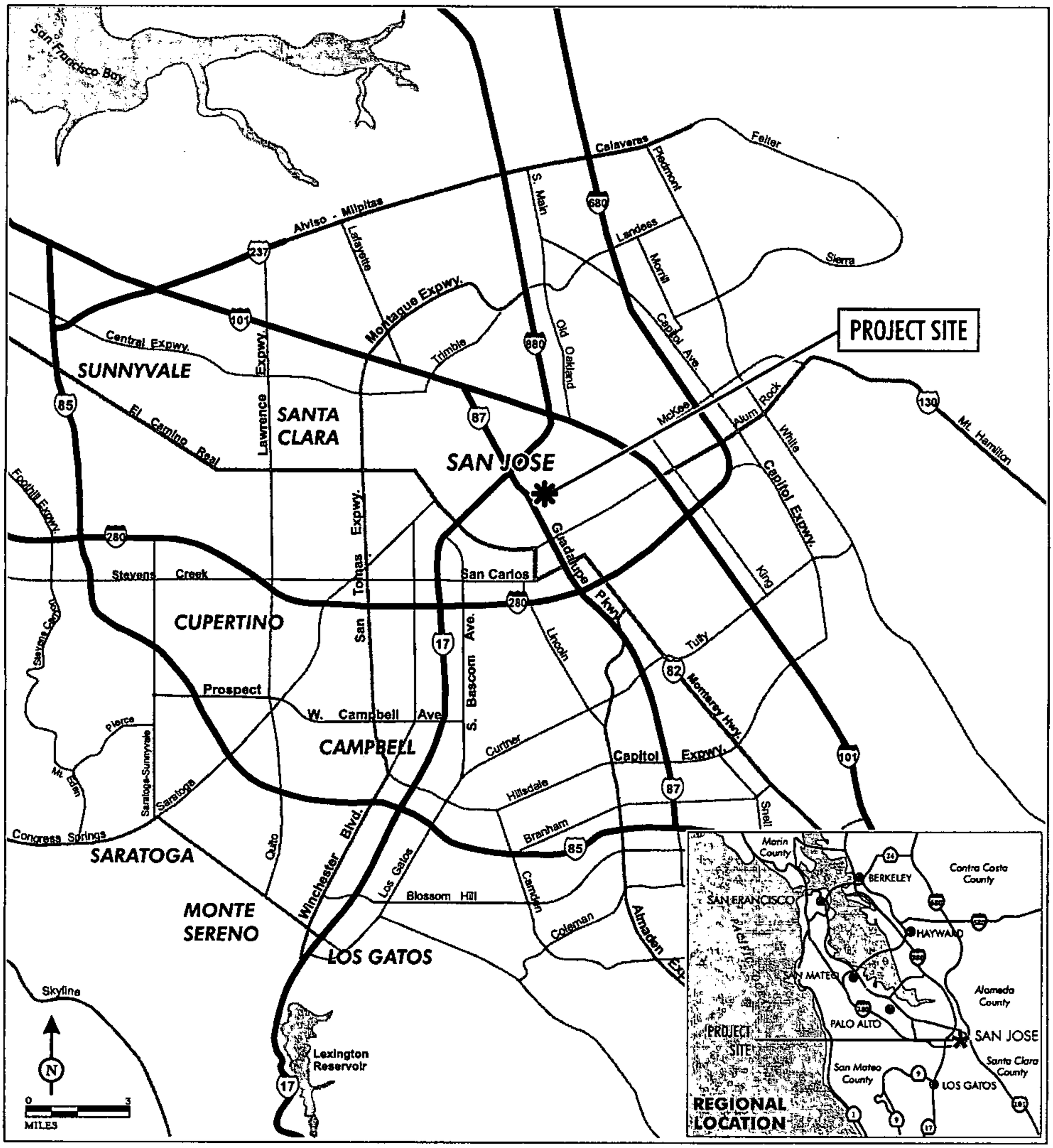
[1] The current project site area includes one additional block (beyond those addressed in the 2001 Draft EIR) on which parcels L1 and L2 are located. The block is bounded by West Julian, Market, Devine and San Pedro Streets.

[2] *Draft Environmental Impact Report, West Julian Revitalization Project, Volumes I and II*, City of San Jose, April 25, 2001.



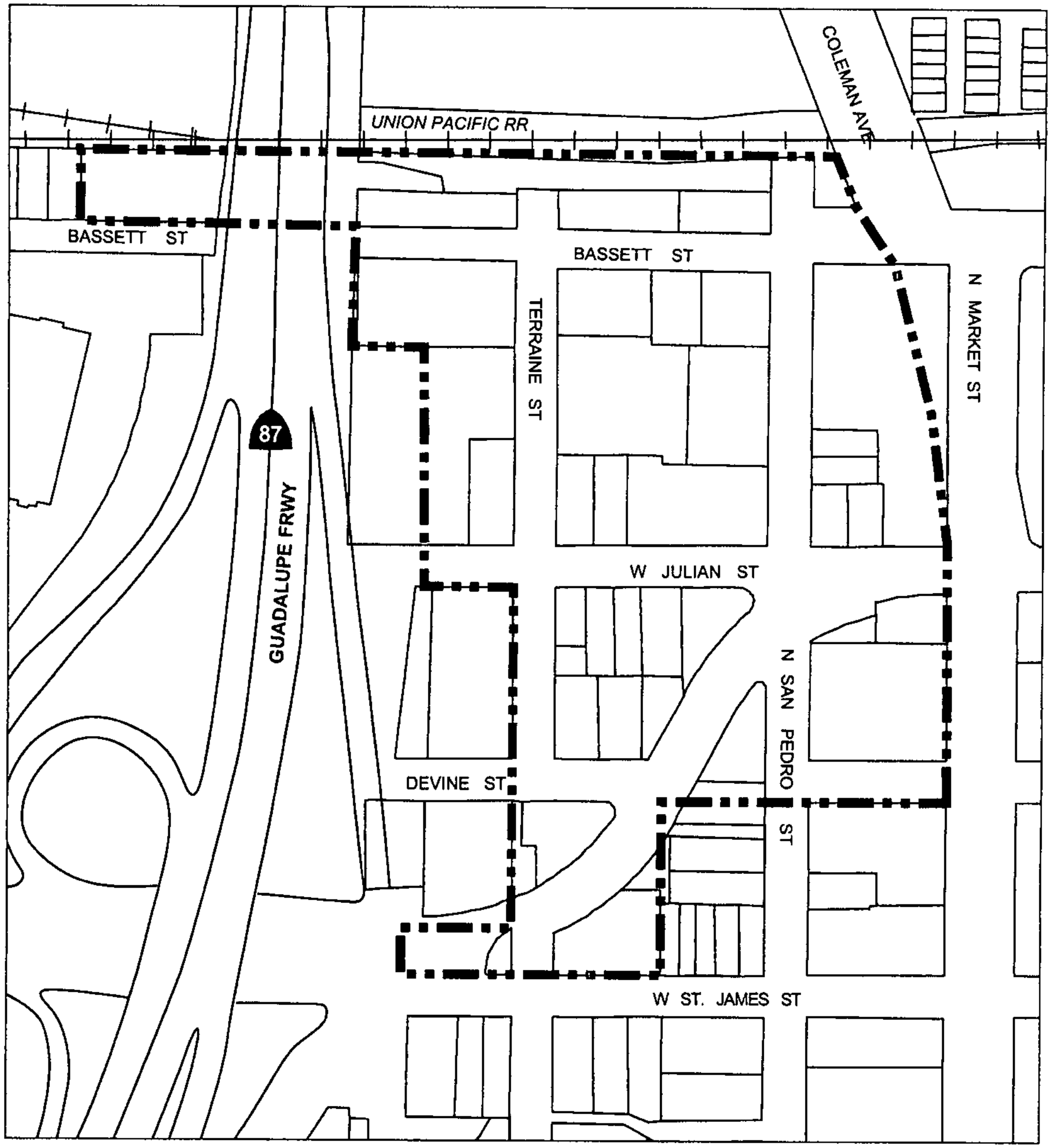
LSA

FIGURE III-1

Brandenburg Residential Project EIR
Regional Location

SOURCE: LSA ASSOCIATES, INC., 2002.

I:\GRAPHICS\JOBS\SJO230 BRANDENBURG\FIGURES\FIG_III1.CDR (01/06/03)



LSA

FIGURE III-2

Brandenburg Mixed Use Project/
North San Pedro Housing Sites
Project Area

SOURCE: CITY OF SAN JOSE, OCTOBER 2002.

I:\IMAGES\GRAPHICS\JOBS\SJO230 BRANDENBURG\FIGURES\FIG_III2.AI (08/14/03)

Throughout 2002 and continuing in 2003, specific parcels within the overall project site have been the subject of remediation for soils and groundwater contamination. That work is ongoing at the time of publication of this Draft EIR and is further described in Chapter V, Setting, Impacts and Mitigation Measures, Section J, Hazards. On March 26, 2002 the Agency Board approved a Purchase and Sale Agreement with the Brandenburg Family Associates and the James W. Wayne Family Partnership to purchase 5.28 acres of land. This sale is contingent upon the completion of subsurface environmental remediation by the Brandenburg Family Associates. This remediation is currently underway and expected to be complete by September 2003.

E. PROPOSED PROJECT

1. General Plan Amendments

The following three General Plan amendments are proposed. Existing General Plan designations are shown in Figure III-3.

a. Land Use Changes. The San Jose Redevelopment Agency proposes to change the Land Use/Transportation Diagram for a 9-acre site from General Commercial on 6.2 acres, Combined Industrial/Commercial on 1-acre, and Residential Support for the Core Area (25+ du/acre) on 1.8-acres to accommodate the allowable uses of the Core Area, as shown in Figure III-4. The 9 acres of these land use changes are a subset of the 11.11-acre project area.

b. Roadway Designation. The San Jose Redevelopment Agency proposes to realign Julian Street between Market and Saint James Streets, as shown in Figure III-4.

c. Downtown Core Boundaries. The San Jose Redevelopment Agency proposes to amend the General Plan text to redefine the Downtown Core Area and Downtown Frame Area boundaries to encompass the project site.

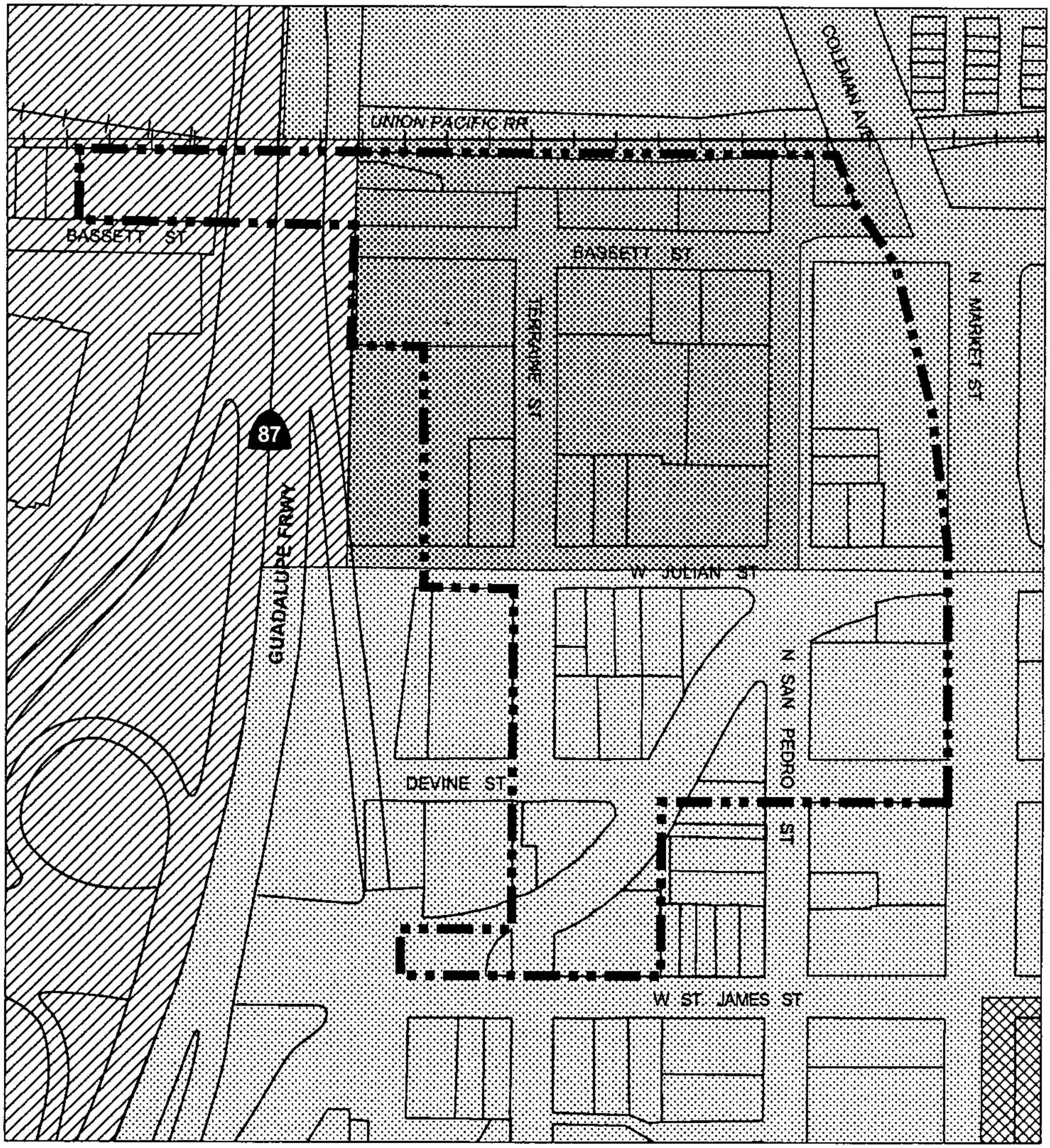
2. Rezoning

Properties in the project area are currently zoned Commercial General (CG), Light Industrial (LI), Heavy Industrial (HI), and Planned Development (A(PD)), as shown in Figure III-5.

A zoning designation is being proposed by the Redevelopment Agency to encompass the existing Downtown Core and all of the property covered by the Brandenburg EIR (see Figure III-6). This zoning designation would accommodate types and intensities of uses allowed in the "Downtown Core" (DC), and is designed to complement the current "Core Area" General Plan land use designation.

3. Public Improvements

The San Jose Redevelopment Agency proposes to realign Julian Street along the new proposed alignment between Market Street and State Route 87, as shown in Figure III-7. The existing "S" curve through the southern portion of the project site would be abandoned or vacated as a public street as shown in Figure III-4. The abandoned/vacated street right-of-way would be sold or would be disposed of by another mechanism or provision.



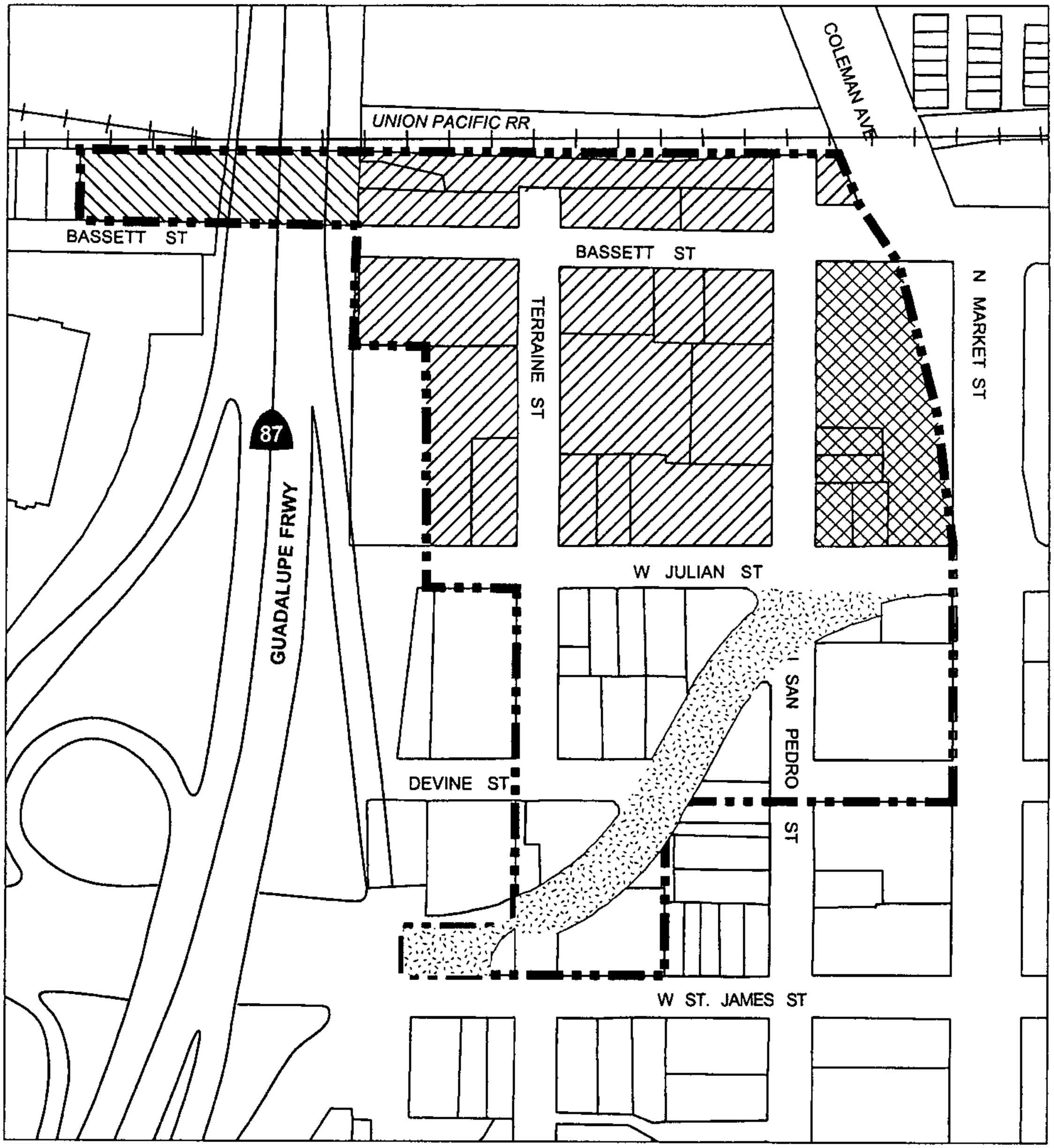
LSA

FIGURE III-3

Brandenburg Mixed Use Project/
North San Pedro Housing Sites
Existing General Plan
Land Use Designations

SOURCE: CITY OF SAN JOSE, OCTOBER 2002.

I:\IMAGES\GRAPHICS\JOBS\SJO230 BRANDENBURG\FIGURES\FIG_III3.AI (08/14/03)



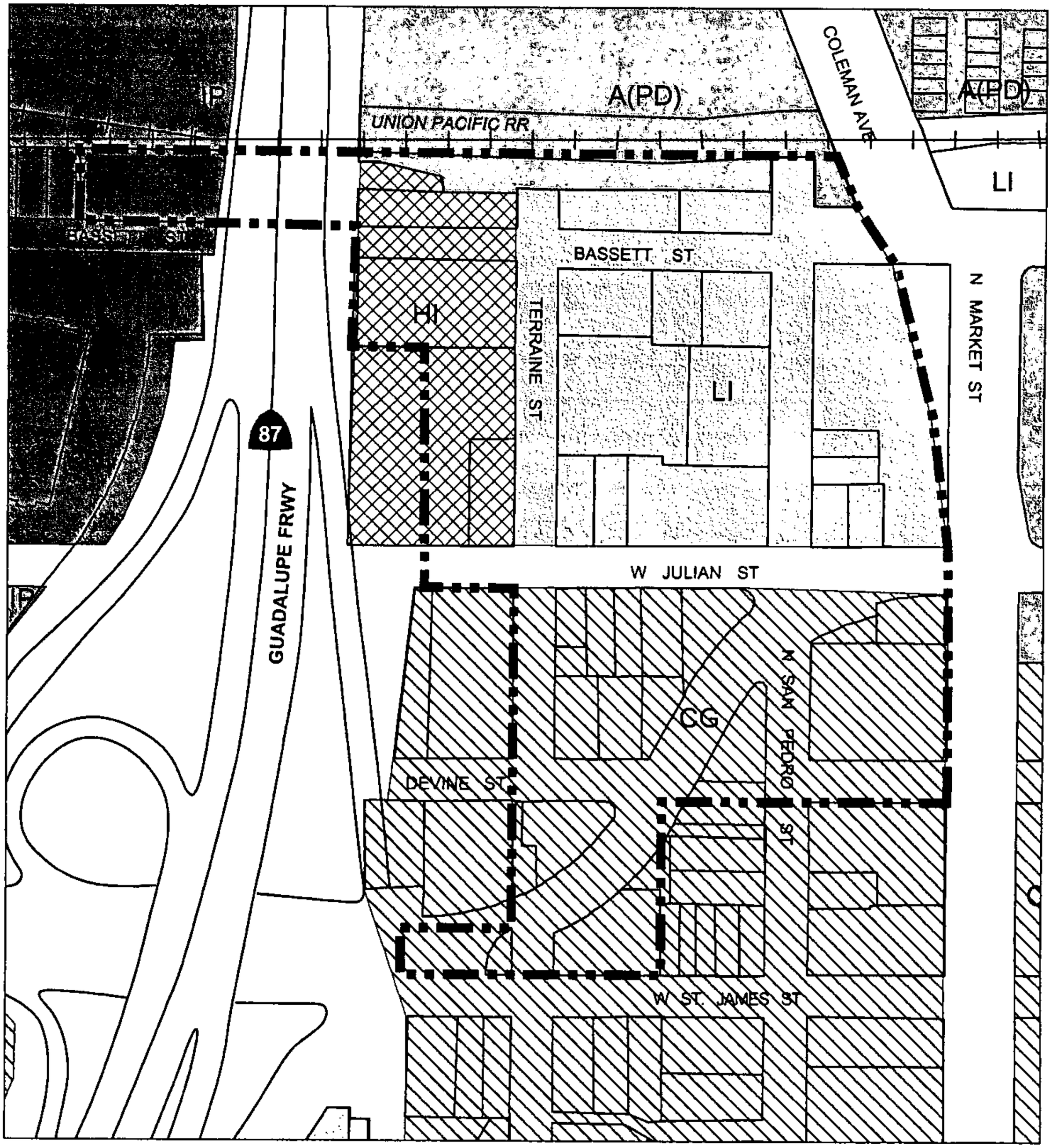
LSA

FIGURE III-4

Brandenburg Mixed Use Project/
North San Pedro Housing Sites
General Plan Amendments

SOURCE: CITY OF SAN JOSE, 2003.

I:\IMAGES\GRAPHICS\JOBS\SJO230 BRANDENBURG\FIGURES\FIG_III4.AI (08/19/03)



LSA

LEGEND

- PROJECT BOUNDARY
- COMMERCIAL GENERAL - CG
- INDUSTRIAL PARK - IP
- LIGHT INDUSTRIAL - LI
- HEAVY INDUSTRIAL - HI
- PLANNED DEVELOPMENT - A(PD)

N

0 100 200

FEET

SOURCE: CITY OF SAN JOSE, OCTOBER 2002.

I:\IMAGES\GRAPHICS\JOBS\SJO230 BRANDENBURG\FIGURES\FIG_III5.AI (08/14/03)

FIGURE III-5

Brandenburg Mixed Use Project/
North San Pedro Housing Sites
Existing Zoning

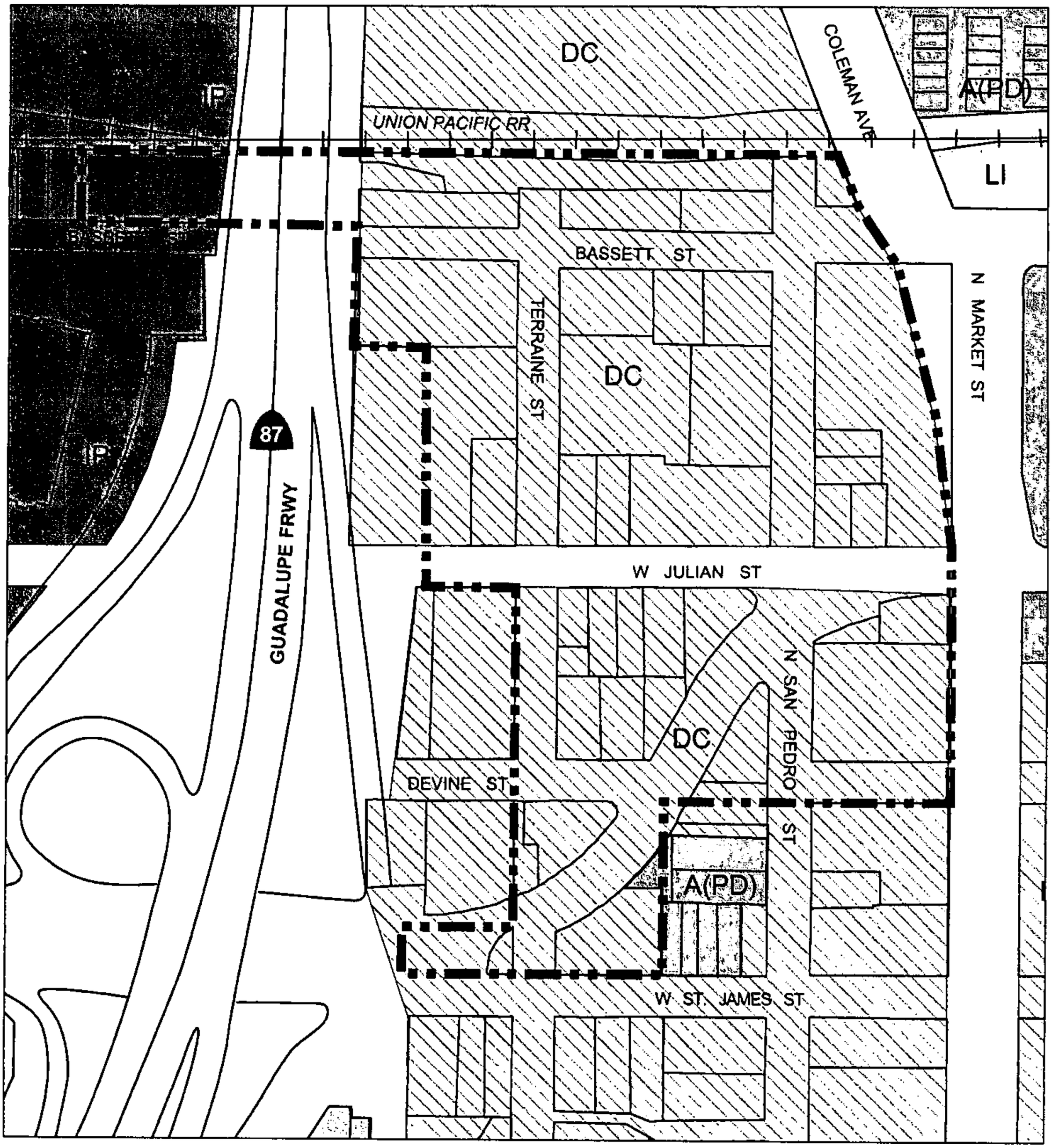
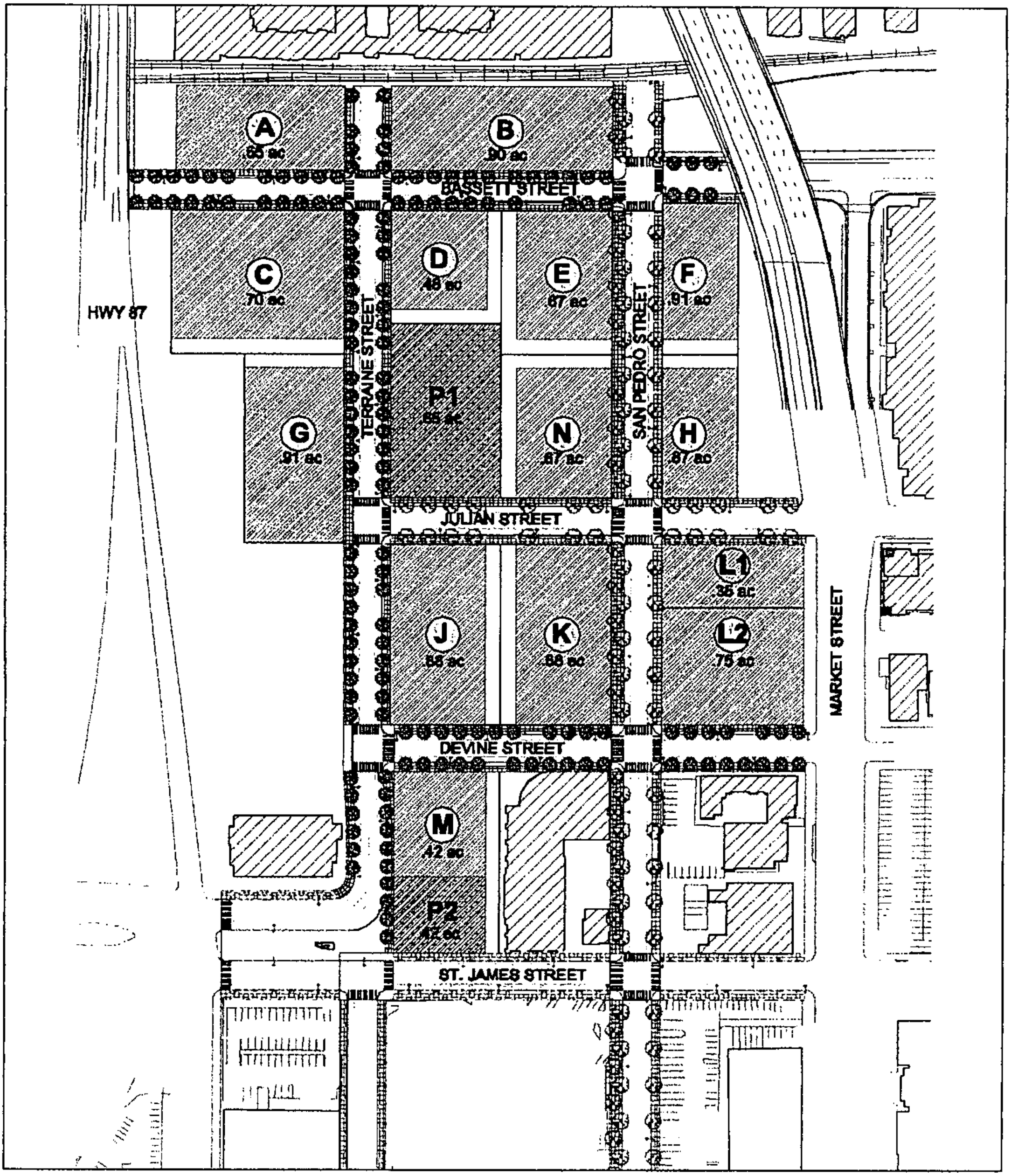


FIGURE III-6

Brandenburg Mixed Use Project/
North San Pedro Housing Sites
Proposed Zoning

SOURCE: CITY OF SAN JOSE, JUNE 2003.

I:\IMAGES\GRAPHICS\JOBS\SJO230 BRANDENBURG\FIGURES\FIG_III6.AI (08/14/03)



LSA

LEGEND

BUILDABLE AREA

SITE ACRES

SURROUNDING BUILDINGS

0 90 180

FEET

FIGURE III-7

Brandenburg Mixed Use Project/
North San Pedro Housing Sites
Illustrative Project Site Plan

SOURCE: CITY OF SAN JOSE REDEVELOPMENT AGENCY, 2003.

I:\IMAGES\GRAPHICS\OBS\SJO230 BRANDENBURG\FIGURES\FIG_III7.AI (07/28/03)

The purpose is to design a roadway network that will provide better access and safety to and around the project site. Roadways affected by these modifications are Julian Street, Terraine Street, Devine Street and possibly St. James Street within the project area.

The project proposes to remove the curved portion of the existing Julian Street and replace it with a straight extension that would connect to the west with Terraine Street. Terraine Street would be extended to St. James Street, and Devine Street to Terraine Street, forming a grid system roadway network. The project would create a new intersection at Terraine Street and Julian Street. South of this intersection, Terraine Street would become a one-way southbound street. Julian and Terrain Streets would then become a one-way arterial moving traffic westward. The project would also involve the installation of at least 3 new traffic signals at the new intersections on Julian and Terraine.

New sidewalks would be constructed along new streets and along the street frontages adjacent to the proposed residential and commercial development. Project sidewalk widths are proposed to be 12-15 feet on Julian Street; 12-15 feet on Bassett Street; 12-15 feet on Terraine Street; and 12-15 feet on Devine Street, 20 feet on North San Pedro Street.

4. Assessment District

The formation of a community facilities district, or other similar financing mechanism(s) is proposed to fund the costs of the public improvements related to the West Julian Street Realignment. The boundaries of the assessment district are proposed to be coterminous with the project boundaries.

5. Acquisition, Assembly and Disposition of Property

The Redevelopment Agency may acquire, assemble, and dispose of parcels in order to facilitate development within the area. At a minimum, the Redevelopment Agency may acquire properties from the State of California, Heirs of Fallon, if any (Old West Julian Street right-of-way between Terraine Street and SR 87 right-of-way), property belonging to Douglas Korten, and any City property rights that may exist on these same properties. These properties may become part of the proposed mixed use development described below. The Redevelopment Agency and the City of San Jose also propose to dispose of, or abandon/vacate the existing West Julian Street right-of-way. (Figure III-8 lists Assessors Parcel Numbers for properties within the project area.)

6. Site Clearance

All existing structures in the project area south of Bassett Street would be demolished and removed. The historic structure located at 151 W. St. James (APN 259-32-024) would remain because it is outside the project area. Structures north of Bassett Street may be demolished and removed or may be adaptively reused as part of the redevelopment of the area.

7. Mixed Use Development

The San Jose Redevelopment Agency has prepared a parcel plan for the development of residential, commercial, park and open space, on 16 parcels within the project boundary (see Figure III-7).[3] The following discussion describes the proposed project's concepts, including proposed development for each parcel, transportation and circulation improvements, parks and open space, and preliminary grading and excavation. Table III-1 provides a summary of development at buildout of the proposed project.

Table III-1: Development Summary at Full Buildout of the Proposed Project

Development Element	Unit
Total Site Area (sq. ft./acres)	484,681 / 11.11
Total Building Site Coverage (sq. ft./acres)	363,004 / 8.32
Maximum Building Height (ft.)	173
Total Dwelling Units	1,501
Dwelling Units per Building Acre	180
Dwelling Units per Site Acre	135
Floor Area Ratio (FAR)	4.94
Gross Square Footage for Housing (sq. ft.)	1,801,317
Total Commercial Space (sq. ft.)	60,000
Total Parking Spaces	2,302
Total Public Park Space (sq. ft./acres)	55,939 / 1.28
Total Excavated Soil Volume (cu. ft.)	9,202,337

Source: San Jose Redevelopment Agency, 2003.

a. Proposed Development. As shown in Figure III-7, the proposed project envisions the development of both residential and commercial space on a total of 14 parcels within the project boundary. Parks would be provided on two parcels. Table III-2 summarizes the proposed development for each parcel. Full implementation of the proposed project would result in the coverage of 8.32 acres of the project site's 11.11 acres. The proposed maximum height for any project buildings is 173 feet.

Table III-2: Development Statistics of the Proposed Project by Parcel

Parcel	Building		Site		D.U.	Comm'l Space (Sq. Ft.)	Pkng. Spaces	Excavation (Cu. Ft.)
	Sq. Ft.	Acres	Sq. Ft.	Acres				
A	24,750	0.57	28,304	0.65	104		156	624,938
B	34,500	0.79	39,256	0.90	141		212	871,125
C	28,125	0.65	30,582	0.70	135		202	710,156
D	18,313	0.42	21,107	0.48	70		105	462,403
E	22,750	0.52	29,273	0.67	87	8,000	140	574,438
F	24,000	0.55	39,437	0.91	101	10,500	162	606,000
G	31,500	0.72	39,724	0.91	133		200	795,375
H	28,000	0.64	37,718	0.87	127	10,500	200	707,000
J	31,850	0.73	38,428	0.88	121		182	804,213
K	31,850	0.73	38,456	0.88	121	12,000	192	804,213
L1	15,196	0.35	15,196	0.35	60	3,500	90	383,699
L2	32,670	0.75	32,670	0.75	169	7,500	253	861,404
M	16,750	0.38	18,439	0.42	45		68	422,938
N	22,750	0.52	29.273	0.67	87	8,000	140	574,438
P1			28,314	0.65				
P2			18,504	0.42				
Total	**363,004**	**8.32**	**484,681**	**11.11**	**1,501**	**60,000**	**2,302**	**9,202,337**

Source: San Jose Redevelopment Agency, 2002.

With the development of 1,501 dwelling units, residential uses would be the most prominent element of the proposed project. Table III-2 provides an overview of the distribution of the dwelling units on each parcel. The development of 1,501 dwelling units results in a density of 132 units per acre. Assuming 1,200 sq.ft. per dwelling unit, the gross residential space would total approximately 1,801,317 square feet. The proposed project's overall floor area ratio (FAR) would be 4.94. Commercial development is anticipated for seven parcels, fronting N. San Pedro Street, between Bassett and Devine Streets, with approximately 60,000 sq.ft. of space. Table III-2 shows the distribution of this commercial space.

[3] The NOP for the Brandenburg Mixed Use Project (January 13, 2003) included one additional parcel (parcel "I") that has subsequently been removed from the project and project site area.

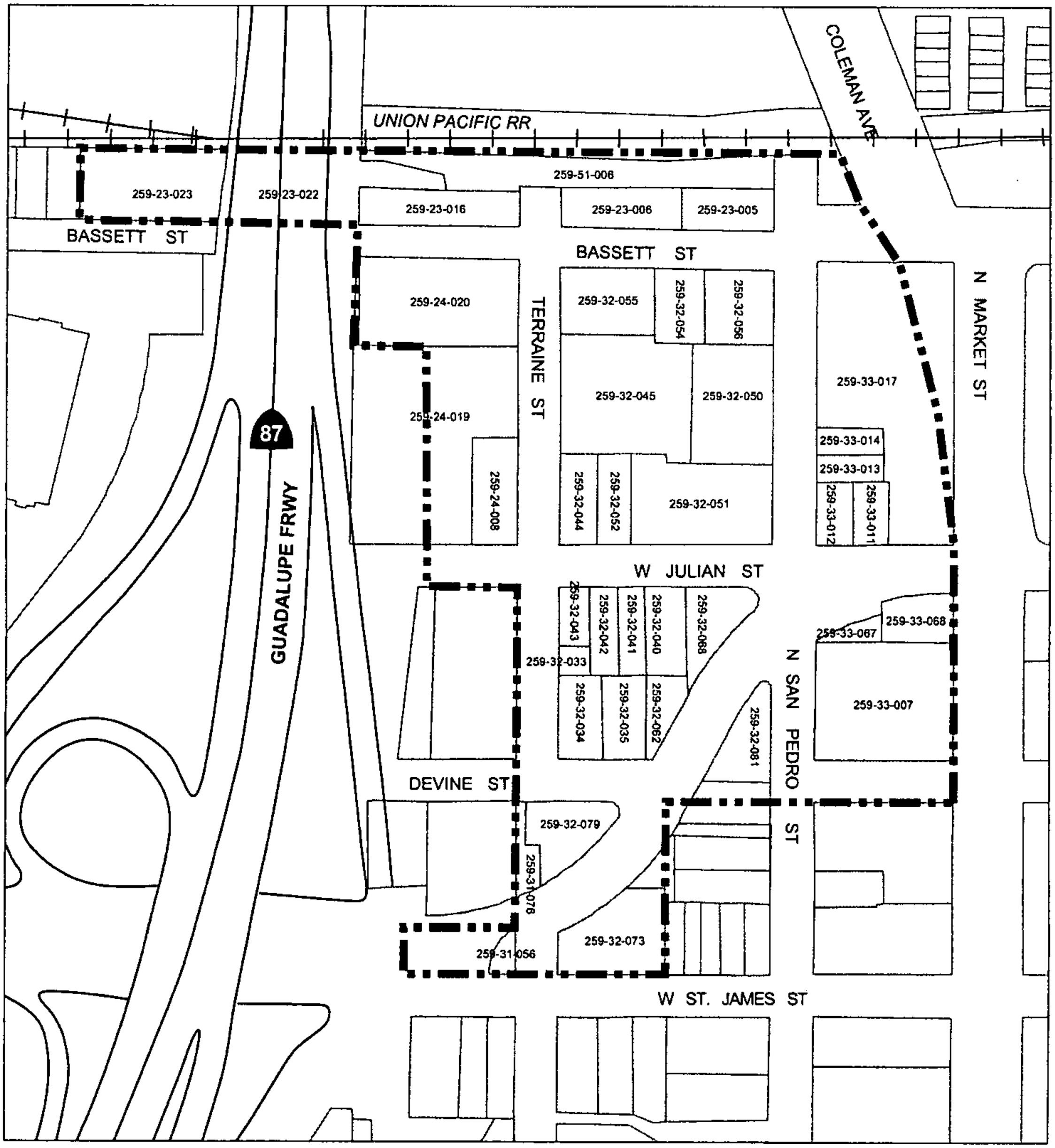


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FIGURE III-8

Brandenburg Mixed Use Project/
North San Pedro Housing Sites
Assessor Parcel Numbers

SOURCE: CITY OF SAN JOSE, 2003.

I:\IMAGES\GRAPHICS\JOBS\SJO230 BRANDENBURG\FIGURES\FIG_III8.AI (08/14/03)

b. Transportation, Circulation, and Parking. The proposed project includes the realignment of W. Julian Street, a portion of which would be reconstructed to fit the grid pattern of adjacent roadway segments between Market and Terraine Streets. The existing "S" curve through the southern portion of the project site would be abandoned/vacated as a public street.

A total of 2,302 parking spaces would be provided throughout the project area in the form of two parking levels below grade. Parking spaces for the 1,501 residential units total 2,252.[4] An additional 50 parking spaces are shown for commercial development. Table III-2 shows the distribution of the parking spaces over the 14 parcels. As shown in Figure III-7, parking access points are found mostly along Bassett Street, W. Julian Street, and Devine Street. Other parking access points are found on San Pedro Street and Market Street.

c. Parks and Open Space. A total of 1.07 acres of parks and open space is also included in the proposed project. Parcels P1 and P2 are set aside to be developed as public park spaces. Parcel P1, located at Terraine and W. Julian Street, provides 0.65 acres of park space, while Parcel P2, an existing park site, located at Terraine and W. St. James Street, provides 0.42 acres.

d. Preliminary Excavation and Grading. The proposed project, with its below grade parking, would require the excavation of 9,202,337 cubic feet of surface soils to a depth of approximately 25 feet. All excavated material will need to be exported from the site. Table III-2 estimates the volumes of excavated material that will be removed from each parcel.

F. USES OF THE EIR

The EIR may be used by the City of San Jose and the San Jose Redevelopment Agency for the following discretionary actions necessary to implement the Project as proposed:

- Amend the General Plan Land Use/Transportation Diagram to change a 9-acre site from General Commercial on 6.2 acres, Combined Industrial/Commercial on 1-acre, and Residential Support for the Core Area (25+ du/acre) on 1.8-acres to Core Area;
- Amend to the Land Use/Transportation Diagram to realign Julian Street between Market and Saint James Streets;
- Amend to the General Plan text to redefine the Downtown Core Area and Downtown Frame Area boundaries to encompass the project site;
- Planned development (PD) rezoning and PD permits;
- Conventional rezonings;
- Development Agreements;
- Development and disposition agreements, owner participation agreements, cooperative agreements between the property owner and the Redevelopment Agency and/or the City of San Jose for infrastructure improvements;
- Conditional use, site development, or special use permits;

[4] Based on 1.5 parking spaces per dwelling unit.

- Tentative maps;
- Contracts for public infrastructure improvements such as realignment of streets and construction and reconstruction;
- Various permits necessary for the onsite and offsite infrastructure;
- Tree removal permits;
- Right-of-way acquisition and/or street abandonment/vacation for public improvements;
- Acquisition and/or condemnation of parcels;
- Historic preservation permits;
- Grading permits;
- Building permits;
- Demolition permits;
- Height and bulk waiver to the commercial zoning district; and
- Establishment of an assessment district, community facility district, or other financing mechanism(s).

The EIR may also be used by the following agencies for other regulatory approvals:

- Regional Water Quality Control Board, Clean Water Act Certification;
- State of California Department of Toxic Substances Control, Remedial Action Plan or Voluntary Cleanup Agreement;
- State of California Department of Transportation (for purposes of property disposition); and/or
- Santa Clara Valley Water District (SCVWD).

IV. CONSISTENCY WITH PLANS AND POLICIES

A. REGIONAL PLANS AND POLICIES

1. 1982 Bay Area Air Quality Plan And 2000 Clean Air Plan: ABAG/BAAQMD/MTC

The 1982 Bay Area Air Quality Plan and 2000 Clean Air Plan (2000 CAP) establish regional policies and guidelines to meet the requirements of the Clean Air Act, as amended. The Bay Area is a non-attainment area for ozone because federal standards have been exceeded for this pollutant. The updated CAP adopted in 2000, outlines measures and improvements to help the Bay Area comply with the State's ozone standard. The 2000 CAP proposes the adoption of transportation, mobile source and stationary source controls on a variety of pollutant sources to offset population growth and provide improvement in air quality. The consistency of the proposed project with this regional plan is primarily a question of the consistency with the population/employment assumptions utilized in developing the CAP. The 2000 CAP is based on the City's General Plan in effect at the time the CAP was approved.[1]

The current General Plan land use designations for the project area, which were also in effect in 1999, are *Core Area* for the parcels located south of West Julian Street; *General Commercial* for the parcels located north of West Julian Street and west of North San Pedro Street; and *Residential Support for the Core Area* (25+ du/ac) for the parcels located north of West Julian Street between Market Street and North San Pedro Street.

The proposed project includes an amendment to the General Plan that would redesignate the parcels located north of West Julian Street from their current designations to *Core Area*. The change in the land use designation from *General Commercial* to *Core Area* in association with the proposed changes in Zoning would decrease the amount of commercial and industrial development that could occur in the area and result in an increase in the opportunities for housing and the permitted density of development in the area which were not reflected in the 2000 CAP. As a result, the project would conflict with the assumptions of the CAP. However, while the project would increase the amount of traffic on local streets and freeways, the project represents land use planning which is generally consistent with this plan and would advance the main goals of the plan. Specifically, this project is located within an urban area and due to the mixed-use nature of the project, would locate jobs in proximity to planned housing opportunities and other services.

Consistency: Because the project includes a General Plan amendment that would increase the opportunities for housing in the area and the permitted density of development, it would be considered technically inconsistent with the Clean Air Plan.

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[1] The 2000 CAP is based on the City's General Plan in effect in 1999, at the time the 2000 CAP was drafted. The City's General Plan, *San Jose 2020 General Plan* (General Plan), was adopted in August 1994 by the City Council.

2. Santa Clara Valley Urban Runoff Pollution Prevention Program

The Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP) was developed in accordance with the requirements of the 1986 San Francisco Bay Basin Water Quality Control Plan, for the purpose of reducing water pollution associated with urban stormwater runoff. This program was also designed to fulfill the requirements of Section 304(1) of the Federal Clean Water Act, which mandated that the Federal Environmental Protection Agency (EPA) develop National Pollutant Discharge Elimination System (NPDES) Permit application requirements for various stormwater discharges, including those from municipal storm drain systems and construction sites. The Project will qualify for a waiver from the new C.3 requirements under several categories of the waiver program, as described in Chapter V, L. Hydrology and Flooding.

The State Water Resources Control Board implemented a NPDES general construction permit for the Santa Clara Valley. For properties of 1 acre or greater, a Notice of Intent (NOI) and Storm Water Pollution Prevention Plan (SWPPP) must be prepared prior to commencement of construction. Development of the project site would be required to conform to the requirements of the NPDES permitting program. The project would comply with the City's National Pollutant Discharge Elimination System (NPDES) permit compliance guidance which requires development to incorporate construction and post-construction mitigation measures to control the discharge of pollutants into the storm drainage system to the maximum extent practicable.

Consistency: The proposed project would be consistent with the provisions of the Santa Clara Valley Urban Runoff Pollution Prevention Program. Measures to reduce water quality impacts of development are proposed in Section V.L, Hydrology and Flooding, of this EIR.

3. Santa Clara Valley Congestion Management Program

The Santa Clara Valley Transportation Authority (VTA) oversees the Santa Clara County *Congestion Management Program* (CMP). This legislation requires that all urbanized counties in California prepare a CMP in order to obtain each county's share of gas tax revenues. The CMP legislation requires that each CMP contain five mandatory elements: 1) a system definition and traffic level of service standard element; 2) a transit service and standards element; 3) a trip reduction and transportation demand management element; 4) a land use impact analysis program element; and 5) a capital improvement element.

The Santa Clara County CMP includes subregional roadways within San Jose that are identified as CMP road facilities. The CMP intersections and the roadway segments that could be impacted by the proposed project are identified and analyzed in Section V.B, Transportation and Circulation.

a. CMP Intersections. The level of service results for the CMP intersections under project conditions are summarized in Table V.B-8. The results show that all of the CMP study intersections would operate at an acceptable LOS D or better under project conditions.

b. CMP Freeway Segments. The analysis of the CMP freeway segments (see Table V.B-10) indicates that the proposed project will significantly impact two segments:

SR 87, Julian to I-280 (southbound PM)
SR 87, Julian to Coleman (northbound AM)

The mitigation necessary to reduce significant impacts upon these freeway segments is the widening of the freeway. This measure is not considered feasible because of significant right-of-way acquisition with many homes and businesses that would need to be demolished. These impacts are therefore designated significant and unavoidable in Chapter V, Section B, Transportation and Circulation, of this EIR.

While it is anticipated that the project would impact regional freeway segments on SR 87, the project represents planning that is generally consistent with the CMP policies. The project is an infill project, located in an urban area that is well served by transit opportunities. However, as this area redevelops into a more intense residential area, VTA should consider providing enhanced transit connections to the project area. Currently there are no bus routes running within the project area. Most existing nearby routes run along First Street and Second Street, some of them on Julian Street and St. James Street, east of First Street. Please refer to Section V.B, Transportation and Circulation, for a more detailed discussion of transit.

Consistency: The analysis provided by Santa Clara Valley Congestion Management Program is provided in Section V.B, Transportation and Circulation, to ensure consistency with this program.

4. Land Use Plan for Areas Surrounding Santa Clara County Airports

The *Land Use Plan for Areas Surrounding Santa Clara County Airport*s, adopted by the Santa Clara County Airport Land Use Commission (ALUC) in September 1992, established land use policies that provide for the orderly growth of the areas surrounding airports in Santa Clara County. The ALUC has established provisions for the regulation of land use, building height, safety, and noise insulation within areas adjacent to each of the public airports in the county. The subject General Plan amendment and rezoning will be referred to the ALUC for a determination of consistency. Under State law, if the ALUC determines that a proposed project is inconsistent with the ALUC land use plan, project approval by the local lead agency requires an action by the agency's decision-making body, by a two-thirds vote, adopting specific findings overriding the ALUC determination. State law requires that general plans and specific plans pertaining to areas adjacent to airports be consistent with the ALUC Land Use Plan.

The Brandenburg/North San Pedro Housing area is located within the ALUC's adopted project referral area for Norman Y. Mineta San Jose International Airport.

Consistency: Project development is intended to be consistent with the ALUC Plan. The subject General Plan amendment and rezoning will be referred to the ALUC for determination of consistency with the policies in the ALUC Land Use Plan. The ALUC has 60 days to provide that determination of whether the project is consistent with its Plan.

B. LOCAL PLANS AND POLICIES

1. San Jose 2020 General Plan

The City's General Plan, *San Jose 2020 General Plan* (General Plan), was adopted in August 1994 by the City Council. The General Plan is an adopted statement of policies for the physical development of the City. As such, it seeks to determine the shape that future development will take within a broad

environmental, social, and economic framework. It is intended for use by both City officials and private citizens in providing a structure for future growth. The General Plan contains each of the State-mandated elements, but since the elements are intrinsically interrelated, they are combined in the document and are not separated according to topic.

The General Plan identifies specific goals and policies for city concept; community development; housing; services and facilities; aesthetics, cultural and recreational resources; natural resources; hazards; and sustainability. One of the key elements of the General Plan is the Land Use/Transportation Diagram, which also includes a rail transit, bicycle network, and scenic routes and trails diagram. The Land Use/Transportation Diagram provides a geographical reference and a spatial context to the goals and policies of the General Plan. It identifies various land use designations, special strategy areas, and planned residential communities/planned communities. An overview of the land use designations and the special strategy area applicable to the proposed project is provided below. A discussion of the General Plan's major strategies and relevant policies and their relationship to the proposed project is also provided.

a. Land Use Designations. The General Plan Land Use/Transportation Diagram identifies the designated land uses for all property within the City's Sphere of Influence. The Diagram also illustrates the relationship between land uses and the transportation network.

The current General Plan land use designations for the project area are *Core Area* for parcels located south of West Julian Street; *General Commercial* for parcels located north of West Julian Street and west of North San Pedro Street; *Residential Support for the Core Area* for parcels located north of West Julian Street between Market Street and North San Pedro Street; and *Combined Industrial/Commercial* for parcels under SR 87 and extending west by one parcel. In order to facilitate the intensification of the project area, a General Plan amendment is proposed for the portions of the project site north of West Julian Street to change the land use designation from *General Commercial, Residential Support for the Core Area*, and *Combined Industrial/Commercial* to *Core Area*. The existing General Plan land use designations for the project site are shown in Figure III-3.

A General Plan amendment related to the transportation network is also proposed. The amendment would remove the arterial street designation on Julian Street between Market and Saint James Streets and show Julian Street realigned with the more traditional grid street pattern that exists in the area as shown in Figures V.B-3 and V.B-4.

b. Special Strategy Areas. Portions of the project site are within the *Downtown Frame Area* and the *Downtown Core Area* (see Figure IV-1). The *Downtown Frame Area* surrounds the *Downtown Core Area*. It is generally bounded by Taylor Street to the north, 11th Street to the east, Keyes/Willow Streets to the south, and the Union

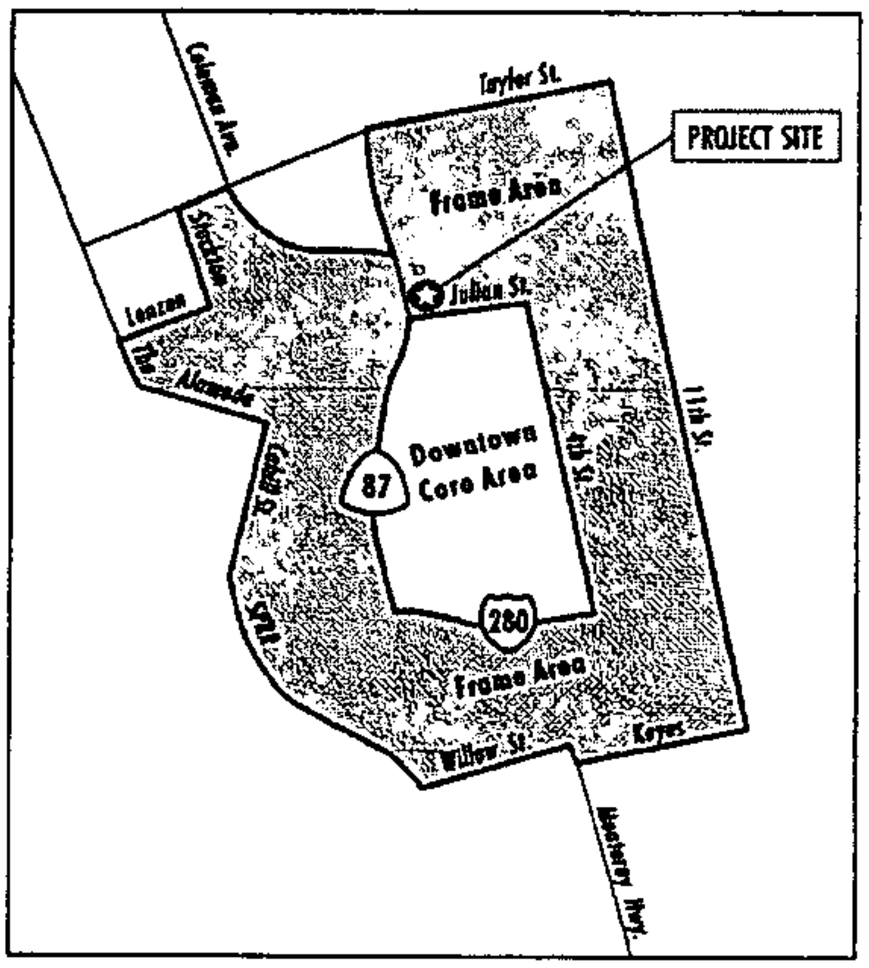


Figure IV-1: Core and Frame Areas

Pacific Railroad tracks/The Alameda to the west. The portion of the project site north of Julian Street is within the *Downtown Frame Area*, but not within the *Core Area*. The portion of the project site south of Julian Street is within the *Downtown Core Area*. The General Plan amendment proposed as part of the project would amend the boundaries of the *Core Area* to include the portions of the project area located north of Julian Street.

c. Major Strategies. The Major Strategies identify the principal objectives of the General Plan. They establish the basic framework for planning in San Jose. The strategies also express the philosophy that the City should take a leadership role in the planning process, while encouraging community and private sector participation. All of the strategies are interrelated and supportive of each other. A summary of the major strategies and policies that apply to the proposed project is presented below:

- Economic Development Major Strategy: The City of San Jose's Economic Development Strategy strives to make San Jose a more "balanced community" by: 1) encouraging more commercial and industrial growth to balance the existing residential development; 2) equitably distributing jobs and housing; and 3) controlling the timing of development.

  The proposed project would encourage revitalization in an area that is underutilized and experiencing blight and deteriorated conditions. However, it would result in a decrease in the potential amount of commercial and industrial development that would be supported by the City's General Plan and Zoning and as such it could potentially conflict with this strategy.

- Sustainable City Major Strategy: The Sustainable City Strategy reflects San Jose's desire to become an environmentally and economically sustainable city, minimizing waste, and efficiently using its natural resources.

  The proposed project includes commercial uses to support the proposed residential uses. The proposed residential development would provide opportunities for more residents to live in proximity to the jobs located in downtown San Jose. The proposed commercial uses will provide opportunities for jobs and shopping for the residents of the area. Both of these components of the project support the City's strategy related to developing a sustainable city.

- Growth Management Major Strategy: The Growth Management Major Strategy addresses the need to balance the urban service demand of new development with the need to balance the City's budget. One of the key components of this Major Strategy is to support infill development as a way of decreasing the costs associated with the provision of public services through increased efficiency.

  The project is consistent with the Growth Management Major Strategy. It is an infill project, which would remove vacant underutilized uses that are economically stagnant.

- Downtown Revitalization Major Strategy: The Downtown Revitalization Major Strategy emphasizes the importance of a prominent and attractive downtown as a catalyst that brings new investment, residents, businesses and visitors to the center city.

  The proposed project is located in and adjacent to the *Downtown Core Area* and will become part of the *Core Area* if the proposed General Plan amendment is approved. Development of the project would replace an underutilized site with commercial and residential uses. Such uses would increase the opportunities for residential and commercial uses in the *Core Area* and support the Downtown Revitalization Major Strategy.

- Housing Major Strategy: One overall City objective is to provide a wide variety of housing opportunities to meet the needs of all economic sectors of the community, and to provide this housing in stable neighborhoods with adequate urban services. The Housing Major Strategy attempts to maximize housing opportunities on infill parcels that are within the City's Urban Service Area.

  The proposed project is consistent with this policy as it will encourage an increase in housing opportunities on an infill site where adequate urban services are available.

- Urban Conservation Preservation Major Strategy: The Strategy underscores the importance of protecting and enhancing San Jose's neighborhoods and historical resources to promote community identity and pride. This Strategy encourages infill development while recognizing that nearby neighborhoods should be protected from impacts. Encouraging economic development will enable the City to maintain current levels of service and help maintain the neighborhoods.

  The proposed project is consistent with this Strategy because it will encourage development within the center of the City (avoiding development on the fringe or outlying areas which would require increased expansion of services and costs to serve the development) and will increase the economic viability of the project area by redeveloping an underutilized site.

d. General Plan Goals and Policies. The key goals and policies that are relevant to the proposed project are discussed below.

Economic Goal 1: Create more job opportunities for existing residents, particularly those who suffer from chronic unemployment, to improve the balance between jobs and resident workers.

The commercial development proposed as part of the project would provide some increased retail job opportunities within the City of San Jose by encouraging development in an area that is currently blighted and underutilized. In addition, construction of the new residential and commercial buildings would result in an increase in those jobs. However, the proposed General Plan amendment and planned development will reduce the amount of land available for commercial and industrial development while increasing the amount of land available for residential development. This amendment could reduce potential job opportunities for existing residents. The project's consistency with this policy would be mixed.

Economic Goal 2: Create a stronger municipal tax base by obtaining a greater share of the total industrial and commercial development in the County, protecting the exclusively industrial areas from incompatible development, and by nurturing and encouraging expansion of the existing industrial and commercial development in the City.

The vicinity of the project site has been in transition from an industrial and warehousing area toward medium to high density residential land uses and associated retail outlets for several years. Therefore, while the proposed project will not help the City further its achievement of this goal, the properties composing the project site have not held the promise of being able to assist in the achievement of this goal for some time.

Balanced Community Policy 1: The City should foster development patterns that will achieve a whole and complete community in San Jose, and improve the balance between jobs and economic development with housing to the greatest extent feasible.

The proposed redevelopment of the project area would be compatible with the existing and planned land uses within San Jose's Urban Service Area because it would continue to encourage new development in an infill context and provide additional housing in the Downtown. It would also minimize the amount of vacant or underutilized industrial lands and blighted uses of other types in the Downtown that may conflict with adjacent existing and planned uses.

Level of Service Policy 5 (Traffic): The minimum overall performance of City streets during peak travel periods should be level of service (LOS) "D". However, in recognition of the unique position of the Downtown as the transit hub of Santa Clara County, and as the center for financial business, institutional and cultural activities, development within the area bounded by Julian street, Fourth Street, Interstate 280 and State Route 87 is exempted from traffic mitigation requirements. Intersections within and on the boundary of this area are also exempted from the LOS "D" performance criteria.

Intersections within the project area subject to the City's level of service policy comply with the City's levels of service requirements. A discussion of transportation impacts is found in Section V.B, Transportation and Circulation, of this EIR.

Historic Archaeological & Cultural Policy 1 : Because historically or archaeologically-significant sites, structures, and districts are irreplaceable resources, their preservation should be a key consideration in the development review process.

The project is not expected to result in the loss of buildings of historic significance. However, as explained in greater detail in Section V.I, Cultural Resources, of this EIR, grading and construction activities could impact subsurface prehistoric and historic resources. Mitigation including monitoring of subsurface activities is included in the project to ensure that potential adverse impacts to archeological resources would not be significant.

Parks and Recreation Goal: Provide park lands and recreation areas which enhance the livability of the urban environment by providing parks for residential neighborhoods, preserving significant natural, historic, scenic and other open space resources, and meeting the open space and recreation services needs of community residents.

The proposed project would enhance recreation opportunities by providing 0.86 of additional acres (Parcel 1) of park and open space within the project boundary (Parcel 2 is already existing park land).

Energy Policy 1: The City should promote development in areas served by public transit and other existing services. Higher residential densities should be encouraged to locate in areas served by primary public transit routes and close to major employment centers.

The proposed project is located in an urban area well served by transit opportunities including light rail, bus, and commuter rail service. The Light Rail (LRT) corridor is located one block east of the project site along North First Street, within walking distance of the proposed uses. However, as discussed in Section V.B, Transportation and Circulation, of this document there are currently no bus routes running within the project area. Most of them run along First Street and Second Street, some of them on Julian Street and St. James Street, east of First Street. A Mitigation Measure that encour-

ages the City to work with the VTA to increase bus access to the project site is included in Section V.B, Transportation and Circulation.

Energy Policy 2: Decisions on land use should consider the proximity of industrial and commercial uses to major residential areas in order to reduce the energy used for commuting.

Implementation of the project would locate over 1,500 residential units within the Downtown where there is a significant amount of commercial uses and opportunities for employment consistent with this policy.

Energy Policy 4: The energy-efficiency of proposed new development should be considered when land use and development review decisions are made. The City's design techniques include provision for solar access, for siting structures to maximize natural heating and cooling, and for landscaping to aid passive cooling protection from prevailing winds and maximum year-round solar access.

The project would be designed in conformance with the City's design guidelines and Title 24 in order to minimize the use of energy.

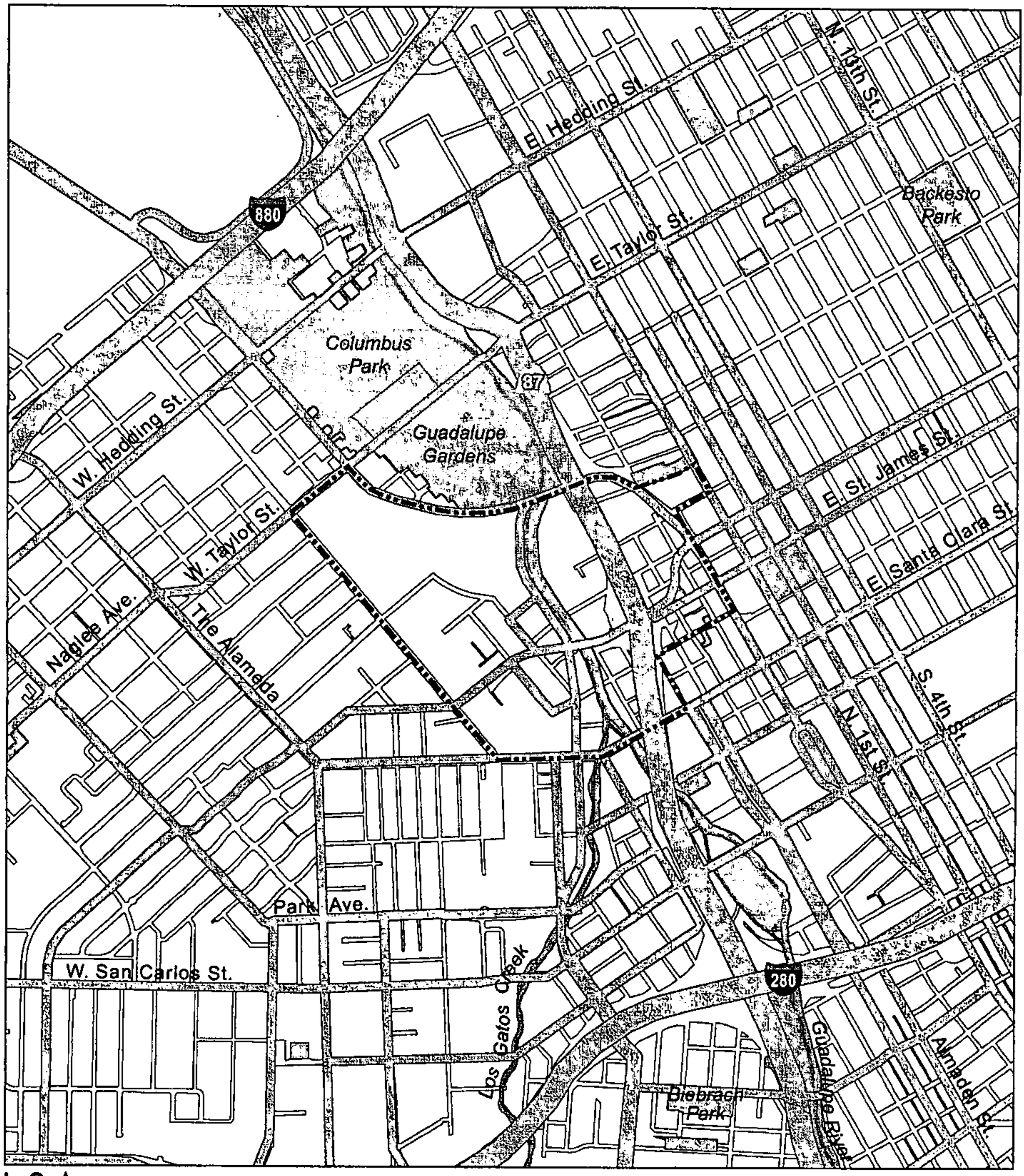
Consistency: The proposed project may conflict with some of the City's goals and policies that relate to preserving industrial land and increasing the number of jobs in San Jose. However, if the City approves the requested General Plan amendment and redesignates the entire project area as *Core Area*, the project will not directly conflict with any of the City's General Plan goals or policies.

3. Julian-Stockton Redevelopment Plan

The project site is within the Julian-Stockton Redevelopment Plan Area, which is generally bounded by Coleman Avenue to the north; North Market Street and North First Street between Bassett Street and Ryland Park to the east; St. John Street and The Alameda/West Santa Clara Street to the south; and Stockton Avenue and Taylor Street to the west and northwest respectively (see Figure IV-2).

According to the Redevelopment Plan the overall objective of the plan is to make the project area physically attractive and economically viable. The goals of the Plan include:

- The strengthening of the economic base of the project area and the community by the provision of new commercial, industrial and office expansion.
- The planning, redesign, and development of undeveloped areas, which are economically stagnant, physically constrained, or improperly utilized.
- The elimination of environmental deficiencies in the project area, including small and irregular lots, obsolete and aged buildings, substandard alleys and deteriorated public improvements, and the like.
- The strengthening of commercial, industrial, and office support functions near the Downtown area.
- The assembly of land into parcels suitable for appropriate, integrated development designed to provide improved pedestrian and vehicular circulation in the project area.
- The provision of adequate land for parking and open spaces.
- The expansion of low and moderate income housing within the project area.



LSA

FIGURE IV-2

Brandenburg Mixed Use Project/
North San Pedro Housing Sites
Julian Stockton Redevelopment Plan Area

SOURCE: LSA ASSOCIATES, INC., 2002

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- The project would support the goals of the Redevelopment Plan of eliminating blight by replacing underutilized and vacant land with commercial services, residential, and park uses.

The principal streets providing overall circulation for the Julian-Stockton Redevelopment Area are set forth in the General Plan. According to the Redevelopment Plan any changes in the existing interior or exterior street layout shall be made in accordance with the General Plan. The City has determined that while the proposed Julian Street realignment would result in a change in the street pattern, the alignment would be consistent with the General Plan. Pedestrian and vehicular circulation would be improved by the project by installation of adequate sidewalks and pedestrian access, and elimination of the "S" curve on Julian Street.

Consistency: The proposed project would improve the economic vitality of the area by replacing currently underutilized and/or vacant buildings and property with commercial, residential, and park uses consistent with the goals of the Julian- Stockton Redevelopment Plan.

a. Green Building Policies. The *Green Building Policies* were adopted by San Jose's City Council on June 19, 2001. As a cohesive framework for new development, the *Green Building Polices* mandate that facilities that are constructed, owned, managed, or financed by the City incorporate a set of environmentally-sound principles into all stages of building development and use. These principles, known as Green Building practices, promote buildings with minimal or beneficial impact on the environment while ensuring quality living and working environments. Green Building standards for new City-initiated construction are based upon the San Jose Leadership in Energy and Environmental Design (LEED™) rating system, which uses existing, proven technology to evaluate the environmental performance of buildings. The *Green Building Policies* require that new City-initiated construction achieve the Green Building standard designated by the San Jose LEED™ rating system, which takes into account a variety of environmental factors ranging from site location (i.e., brownfield development would receive a higher rating than non-infill development) to construction material (i.e. buildings that utilize locally-produced materials would receive a higher rating than buildings that use imported materials). In addition, the *Green Building Polices* encourage the adoption of green building practices by the private sector.

Consistency: The Redevelopment Agency will encourage the future developers of the proposed project to utilize green building practices consistent with the City's policies.

b. Downtown Strategy 2010 and **Strategy 2000: San Jose Greater Downtown Strategy for Development**. Both of these documents are described and discussed below.

(1) Downtown Strategy 2010. The Downtown Strategy Plan 2010 was adopted in 1992 and provides a long-range program for the redevelopment and preservation of the central core of Downtown San Jose. The objective of the Plan is to promote the development of a prominent and vital 24-hour downtown that is a catalyst to bring new investment, residents, and visitors to the center of the City. The Plan envisions Downtown as a regional focus for employment, cultural activities, entertainment, civic uses, and retail activity at the center of an expanding transit network, and near to existing and planned residential areas.

(2) Strategy 2000. The plan known as *Strategy 2000* was created for the Redevelopment Agency of San Jose to be a guide for development and redevelopment of Greater Downtown San

Jose. The desire for a strategy to guide development grew out of the development pressure felt by the City during the 1990s through 2001, a period of unprecedented prosperity. Knowing that San Jose is a large City with a small Downtown, and wanting to prevent sprawling development in other areas of the City, the Redevelopment Agency initiated a planning process that culminated in the preparation of *Strategy 2000.* This long-range strategy program for redevelopment focuses on first revitalizing the traditional Downtown center by allowing higher density infill development and replacement of under-utilized uses, and then expanding the land use intensities of the Downtown into areas with significant unbuilt and underutilized parcels of land to the west and north.

It is important to note that *Strategy 2000* is a general document that attempts to articulate a vision and recommend policies and actions toward achieving that vision. *Strategy 2000* is not a General Plan, a Specific Plan, or a Redevelopment Plan, as defined by State Law, and does not determine land uses, zoning requirements, or detailed policies. *Strategy 2000* has been presented to the City Council for informational purposes, but is not yet adopted.

Consistency: The project area is presently located within the Downtown Core and Frame Areas. (Part of the proposed project involves extending the Core Area designation northward to include the entire project area.) The proposed project would support the goals and implementation of both the existing Downtown Strategy Plan 2010 and the proposed (but not yet adopted) Strategy 2000. The project would promote development of housing and retail uses near transit opportunities and near existing residential development.

c. Guadalupe River Park Master Plan. The Master Plan was published in 2002. The document "reflects all the work done since the 1960s to bring the Guadalupe River Park to fruition, outlining the numerous public spaces and flood control facilities along the 2.6 miles of river that run through downtown."[2] In a section outlining the ideals of the park, the master plan provides the following overview of development there: "Future park development proposals should go through a rigorous screening process to ensure that they are compatible with this master plan. In general, future development of the park should be consistent with the distinctive qualities already there – the predominance of natural elements, the focus on a variety of activities that enhance the quality of life in the city, the consistent use of appropriate materials, and the absence of commercial ventures, to name a few." These and other ideals relating to future development in the Park are also expressed in greater detail as policies.

Because the policies of the Master Plan address properties and future development within its own study area – which is, at its closest point, approximately 1,000 feet west of the southwestern edge of the Brandenburg Mixed Use Project/North San Pedro Housing Sites project area (on the other side of SR 87) – no aspect of the proposed project would be inconsistent with the Master Plan. Traffic on Julian Street, as it crosses the river, would not change substantially as a result of the proposed project, nor would other impacts (e.g., air, noise, flooding, shade and shadow) of the proposed project be perceptible within the park.

Consistency: The proposed project would not be inconsistent with the Guadalupe River Park Master Plan. Development of housing on the project site would introduce more San Jose residents to a

[2] Excerpted from the *Guadalupe River Park Master Plan 2002*, San Jose California, prepared by the City of San Jose. San Jose Redevelopment Agency, Santa Clara Valley Water District, and United States Army Corps of Engineers.

neighborhood near the park and thus, increase its usage levels, but that would not be considered an adverse effect.

d. Diridon/Arena Area Strategic Development Plan.[3] The proposed *Diridon/Arena Strategic Development Plan* includes strategies and actions that aim to: (a) complete the Downtown Riverfront Park encompassing the Guadalupe River and Los Gatos Creek as local and regional open space amenities; (b) expand Diridon Station to create a grand transit station of architectural and functional significance; (c) enhance existing residential neighborhoods and reinforce downtown living with additional high density residential development; (d) create a high activity, lively pedestrian environment with excellent connectivity to downtown destinations and regional transit; (e) provide a variety of commercial and mixed use development opportunities, ranging from larger scale corporate or institutional sites to incremental, infill development zones; and (f) encourage future development in three development zones: (i) Diridon Station Area (Transit Oriented/Downtown District); (ii) Station South (Transit Oriented Neighborhood District); and (iii) Arena North (Mixed Use District).

As is the case with the *Guadalupe River Park Master Plan* the study area for the proposed *Diridon/Arena Area Strategic Development Plan* is approximately 1,000 feet west of the southwestern edge of the Brandenburg Mixed Use Project/North San Pedro Housing Sites project area.

Consistency: The proposed project would not be inconsistent with the proposed *Diridon/Arena Area Strategic Development Plan*. A mixed use development of the type and scale proposed would complement the vision set forth in the *Diridon/Arena Area Strategic Development Plan*.

[3] Extracted from the *Diridon/Arena Strategic Development Plan*, Final Draft, October 16, 2002.

V. SETTING, IMPACTS, AND MITIGATION MEASURES

This chapter contains an analysis of each potentially significant environmental issue that has been identified in the Notice of Preparation (NOP) prepared for the Brandenburg Residential Project, and, as such, constitutes the major portion of the Draft EIR. Sections A through N of this chapter describe the environmental setting of the Brandenburg project site as it relates to each specific issue. The impacts resulting from implementation of the proposed project and mitigation measures that would reduce impacts of the project, if necessary, are also presented in each of the sections.

DETERMINATION OF SIGNIFICANCE

Under CEQA, a significant effect is defined as a substantial, or potentially substantial, adverse change in the environment.[1] The *CEQA Guidelines* direct that this determination be based on scientific and factual data. Each impact and mitigation measure section of this chapter is prefaced by a summary of criteria of significance. These criteria have been developed in a cooperative process with the Agency, City, and LSA Associates, Inc. staff using the *CEQA Guidelines* and applicable City policies, such as the *San Jose 2020 General Plan* (General Plan).

1. Issues Addressed in the Draft EIR

The following environmental issues are addressed in this chapter:

- Land Use
- Transportation and Circulation
- Air Quality
- Noise
- Shade and Shadow
- Aesthetics
- Vegetation and Wildlife
- Geology
- Cultural Resources
- Hazards and Hazardous Materials
- Public Facilities and Services
- Hydrology and Flooding
- Utilities and Service Systems
- Energy

Preliminary analysis determined that the proposed project would not result in significant impacts to agricultural resources; mineral resources; and population, employment, and housing. Consequently, these issues are not examined in this chapter of the EIR.

[1] Public Resources Code 21068.

2. Format of Issue Sections

Each environmental topic considered in this chapter is comprised of two primary sections: (1) Setting, and (2) Impacts and Mitigation Measures. An overview of the general organization and the information provided in the two sections is provided below:

- *Setting*. The Setting section for each environmental topic generally provides a description of the applicable physical setting for the project site and its surroundings (e.g., existing land uses, existing soil conditions, existing traffic conditions). An overview of regulatory considerations that are applicable to the specific environmental topic is also provided.
- *Impacts and Mitigation Measures*. The Impacts and Mitigation Measures section for each environmental topic presents a discussion of the impacts that could result from implementation of the proposed Brandenburg Residential Project. The section begins with the criteria of significance, establishing the thresholds to determine whether an impact is significant. The latter part of this section presents the impacts from the proposed project and mitigation measures, if required. The impacts of the proposed project are delineated into separate categories based on their significance according to the criteria listed in each topical section: less-than-significant impacts, which do not require mitigation measures, and significant impacts, which do require mitigation measures.

Impacts are numbered and shown in bold type, and the corresponding mitigation measures are numbered and indented. Impacts and mitigation measures are numbered consecutively within each topic and begin with an acronymic reference to the impact section (e.g., LU). The following symbols are used for individual topics:

LU:	Land Use and Public Policy
TRANS:	Transportation and Circulation
AIR:	Air Quality
NOI:	Noise
SHADE:	Shade and Shadow
AES:	Aesthetics
VEG:	Vegetation and Wildlife
GEO:	Geology
CULT:	Cultural Resources
HAZ:	Hazards
SVCS:	Public Facilities and Services
HYDRO:	Hydrology and Flooding
UTIL:	Utilities and Infrastructure Service Systems
NRG:	Energy

Impacts are also categorized by type of impact, as follows: Less-than-Significant, Significant, and Significant and Unavoidable. These notations are provided following each impact and each mitigation measure to identify their significance before and after mitigation.

A. LAND USE

This section describes existing land uses within the Brandenburg Mixed Use Project site and vicinity and evaluates potential land use impacts that would result from the proposed project.

1. Setting

The following setting information provides an overview of the land uses within the project site and surrounding areas. The section begins by describing the regional setting and then provides more specific information about the project site and its vicinity. A description of the planning and regulatory setting for the project site follows.

a. Regional Location. The project site is located in the Santa Clara Valley, situated at the southern part of the San Francisco Bay within the City of San Jose, as shown in Figure III-1. The valley was historically used for agricultural production. However, due in part to the establishment and growth of the electronics industry, the Santa Clara Valley today consists largely of urban development.

The project site is generally situated east of the elevated portion of State Route 87 (SR 87 or Guadalupe Parkway), south of the Union Pacific Railroad line, north of West St. James Street, and west of the Market Street/Coleman Avenue overpass, as shown in Figure III-2. The project site of approximately 11 acres is located in downtown San Jose and is roughly bounded by Basset Street to the north, N. San Pedro Street to the east, Devine Street to the south, and Terraine Street to the west.

b. Existing Land Uses in the Plan Area. The project site is located within the Julian-Stockton Redevelopment Area (see Figure IV-2), which is located within the older, urbanized center of the City of San Jose. An elevated portion of SR 87 is located west of the project site, the Union Pacific Railroad line is located to the north, and an elevated portion of the Market Street/Coleman Avenue overpass is located to the east. These major transportation corridors surround the project site on all but the southern side.

Approximately 16 parcels are located within the project site. The project site contains a mix of industrial, warehouse, commercial, and office land uses. Several older structures pre-dating the turn of the century are interspersed with newer buildings of varying ages and styles, including a 2½ story Victorian-style and one-story concrete warehouse structures. One existing Victorian-style residential building has been converted to office uses. Due to the variety of uses, and the differing ages, styles, and condition of the buildings, there is a lack of unifying character or cohesive architectural style in the area. Many of the industrial buildings in the project area are in poor condition and are currently boarded up and vacant.

For descriptive purposes, the project site can be divided into two areas—generally north and south, respectively, of the old pre-1970s Julian Street alignment.

(1) Existing Land Uses North of Old Julian Street. Uses in this area include four commercial businesses. Many of the businesses that have historically operated in this area have been closed, and many buildings are currently vacant (see Figure V.A-1 and V.A-2).

An elevated portion of the Market Street/Coleman Avenue overpass forms the northeastern boundary of the site (see Figure V.A-3). Older industrial and warehouse buildings are located north of Bassett Street, immediately south of the railroad tracks (see Figure V.A-4). Another industrial building is located east of Terraine Street. The right-of-way under the freeway along Bassett Street is used for vehicle storage. A surface parking lot is located on the northeast corner of North San Pedro Street and West Julian Street (a portion of the "Bike Barn" site); this lot serves office employees in the project vicinity to the south. Vacant parcels are located on the northwest corner of Bassett Street and Terraine Street and on the northwest corner of West Julian Street and Terraine Street.

(2) Existing Land Uses South of Old Julian Street. The project area south of Old Julian Street and West Julian Street, west of North San Pedro Street, east of Terraine Street and the SR 87 off-ramp, and north of East St. James Street, contains a mix of commercial and office uses (see Figure V.A-5). West Julian Street diverges from the historic Old Julian Street alignment at the southeast corner of East Julian Street and North San Pedro Street where it curves through the middle of this portion of the project area.

Several Victorian-style buildings are located within the area. One Victorian structure, located on the northwest corner of Julian Street and Devine Street has been converted into offices. The approximately ½-acre Pellier Park is located southeast of West Julian Street and north of East St. James Street (see Figure V.A-6). A surface parking lot is located east of Pellier Park, on the southwest corner of Julian Street and North San Pedro Street.

c. Land Uses in the Vicinity of the Project Site. A variety of land uses are found in the vicinity of the project site. These land uses are described below and illustrated in Figure V.A-7.

(1) Land Uses to the North. The portion of land adjacent to the north of the project bounded by Guadalupe Freeway to the west, Southern Pacific Railroad to the south, North 1st Street to the east, and Ryland Street to the north is currently experiencing large scale residential and office development (see Figure V.A-8). Building activity also includes the construction of a multi-level parking structure. In addition, the Coleman Avenue Overpass consisting of 2 lanes of traffic in each direction extends northwest through the middle of this area. Prior to this construction activity, this area was similar to the Brandenburg project site, composed of lands that were partly industrial but mostly vacant with ruderal vegetation and sparse bushes. Further north, commercial/light industrial warehouses and office uses exist along Ryland Street. At the eastern terminus of Ryland Street, Ryland Park consisting of approximately 3 acres extends to 1st Street.

(2) Land Uses to the East. Land uses east of the project site are generally office and residential. Land uses adjacent to the east of the project site from north to south begin with a permit parking lot that extends to 1st Street. Preceding south, multi-family residential occupies the block on the northeast corner of Market Street and East Julian Street (see Figure V.A-9). In addition, new condominiums are currently being constructed on the south side of East Julian Street between Market Street and 1st Street. Two Victorian houses on the northeast corner of Devine Street and Market Street as well as the uses along the west side of 1st Street have been converted into law

Text continues on page 66

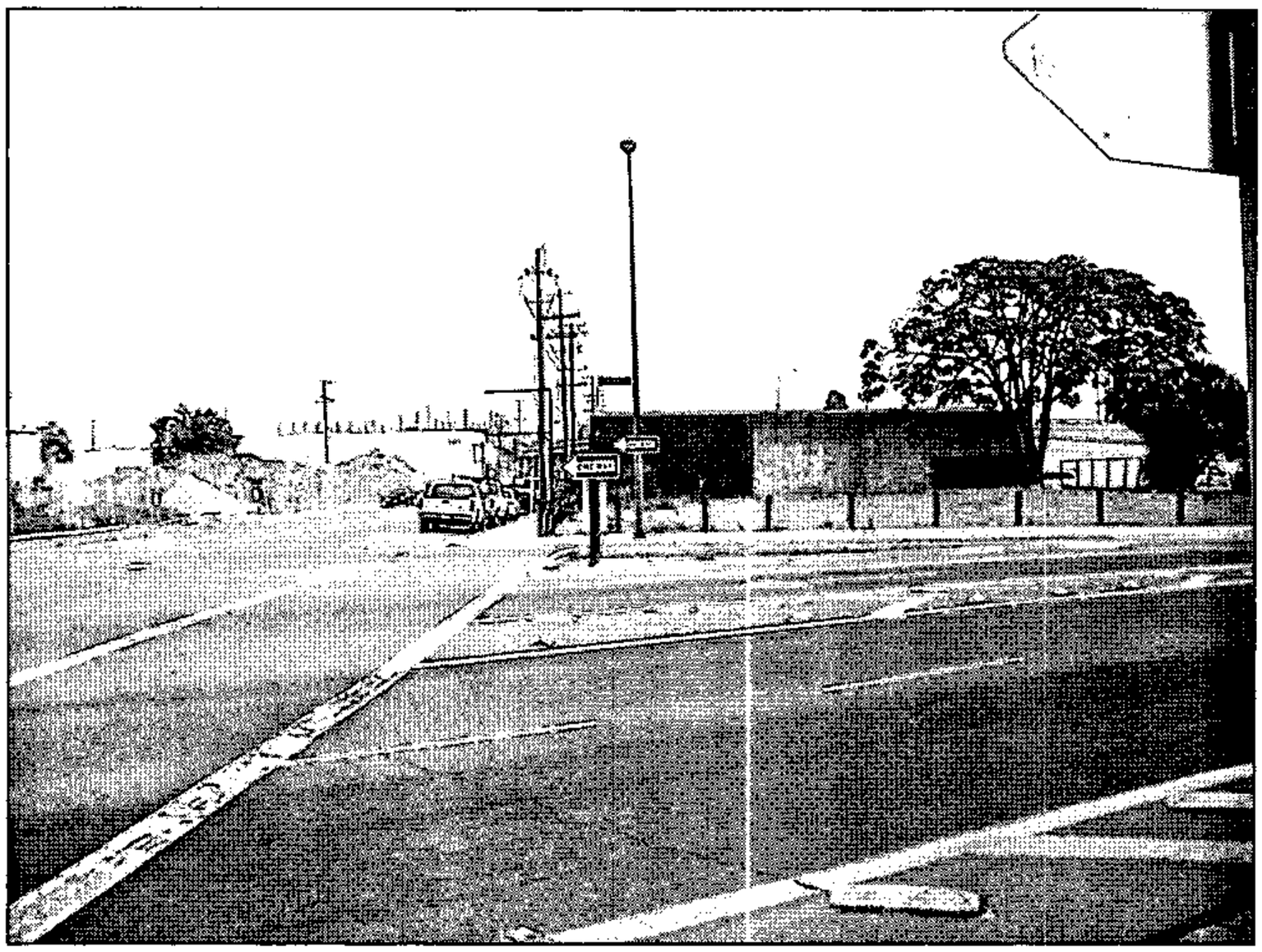

Figure V.A-1: View of Project Site, Looking North from Intersection of W. Julian and N. San Pedro Streets

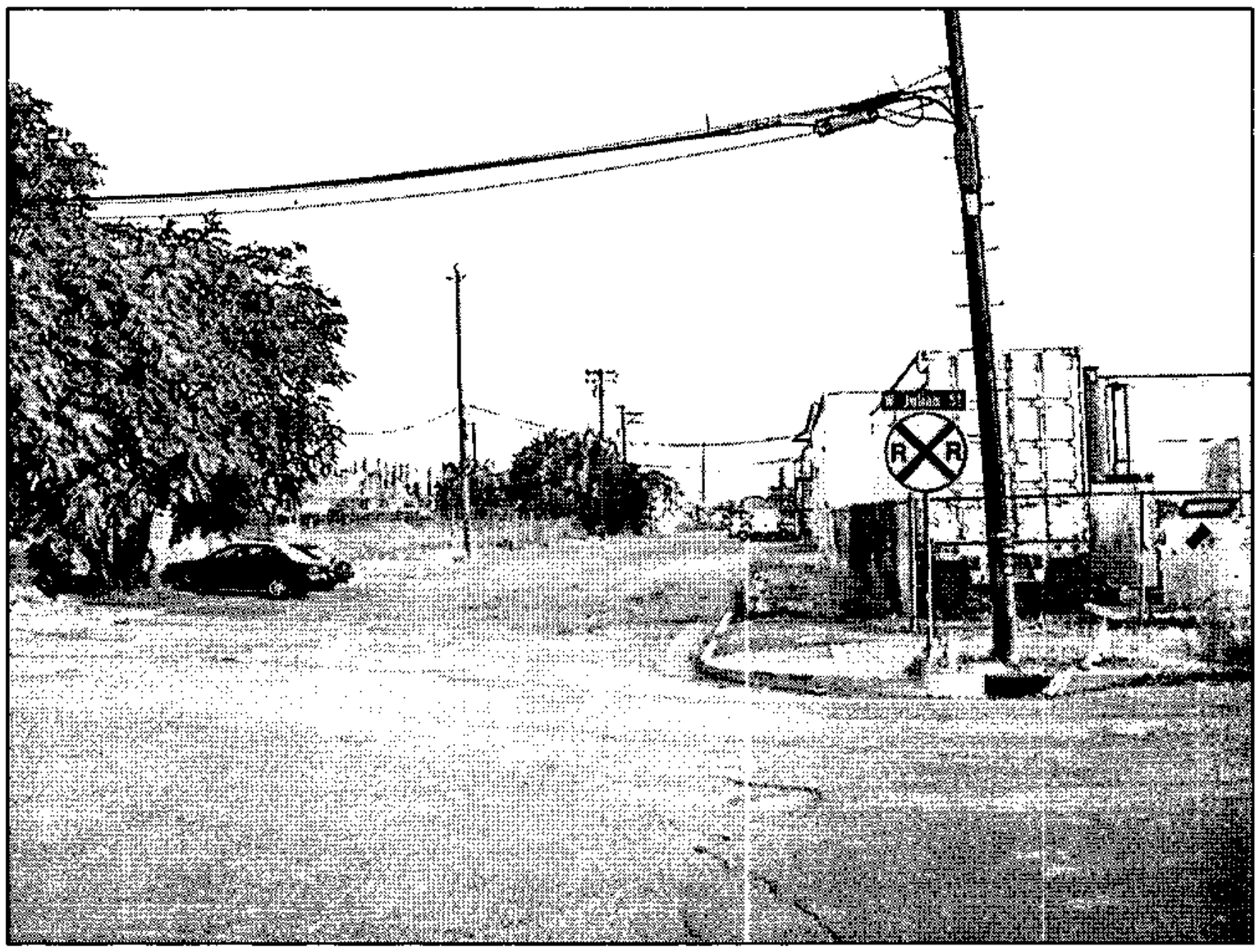

Figure V.A-2: View of Project Site, Looking North from Intersection of W. Julian and Terraine Streets

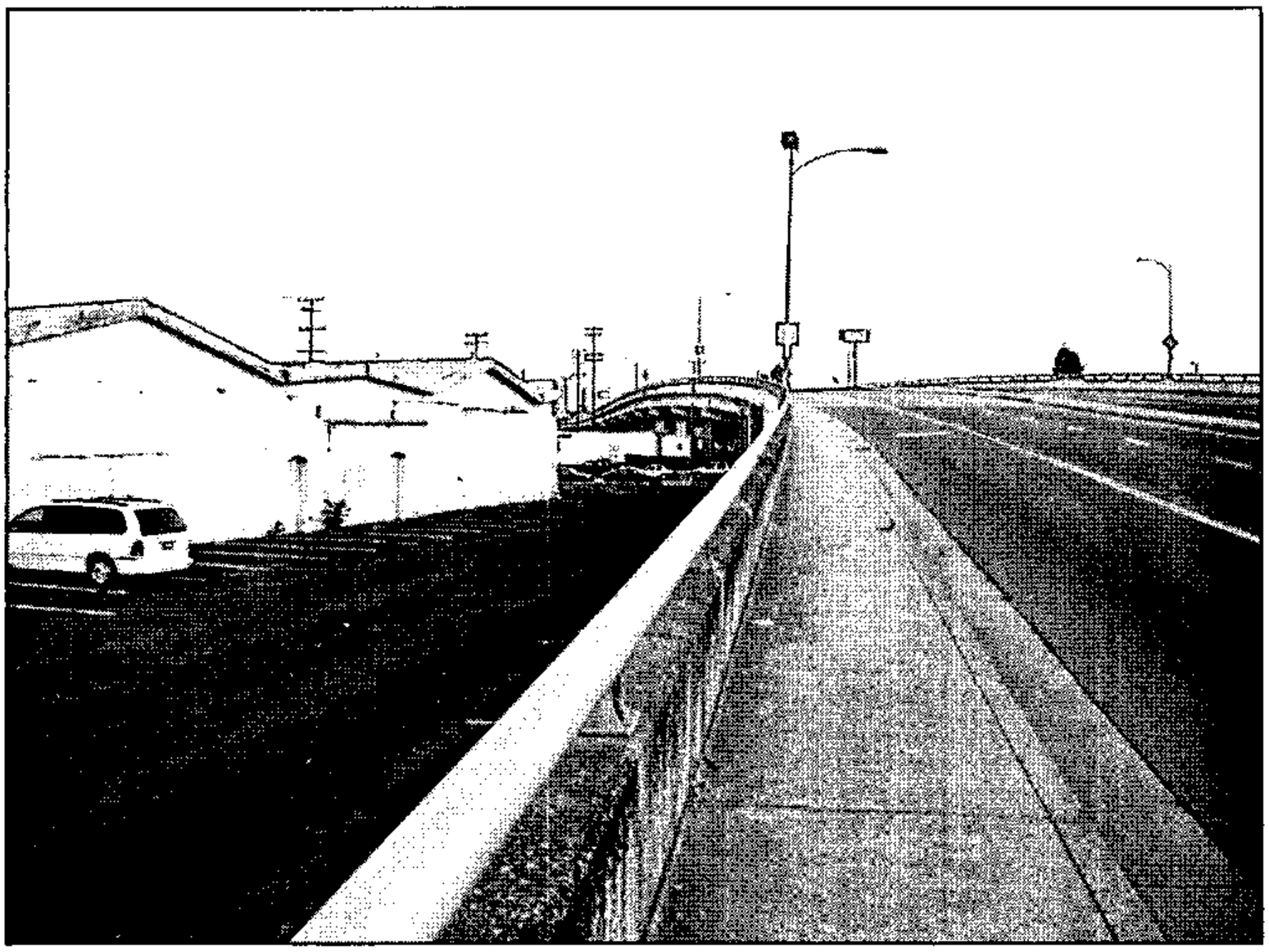

Figure V.A-3: View of Market Street/Coleman Avenue Overpass, Looking North

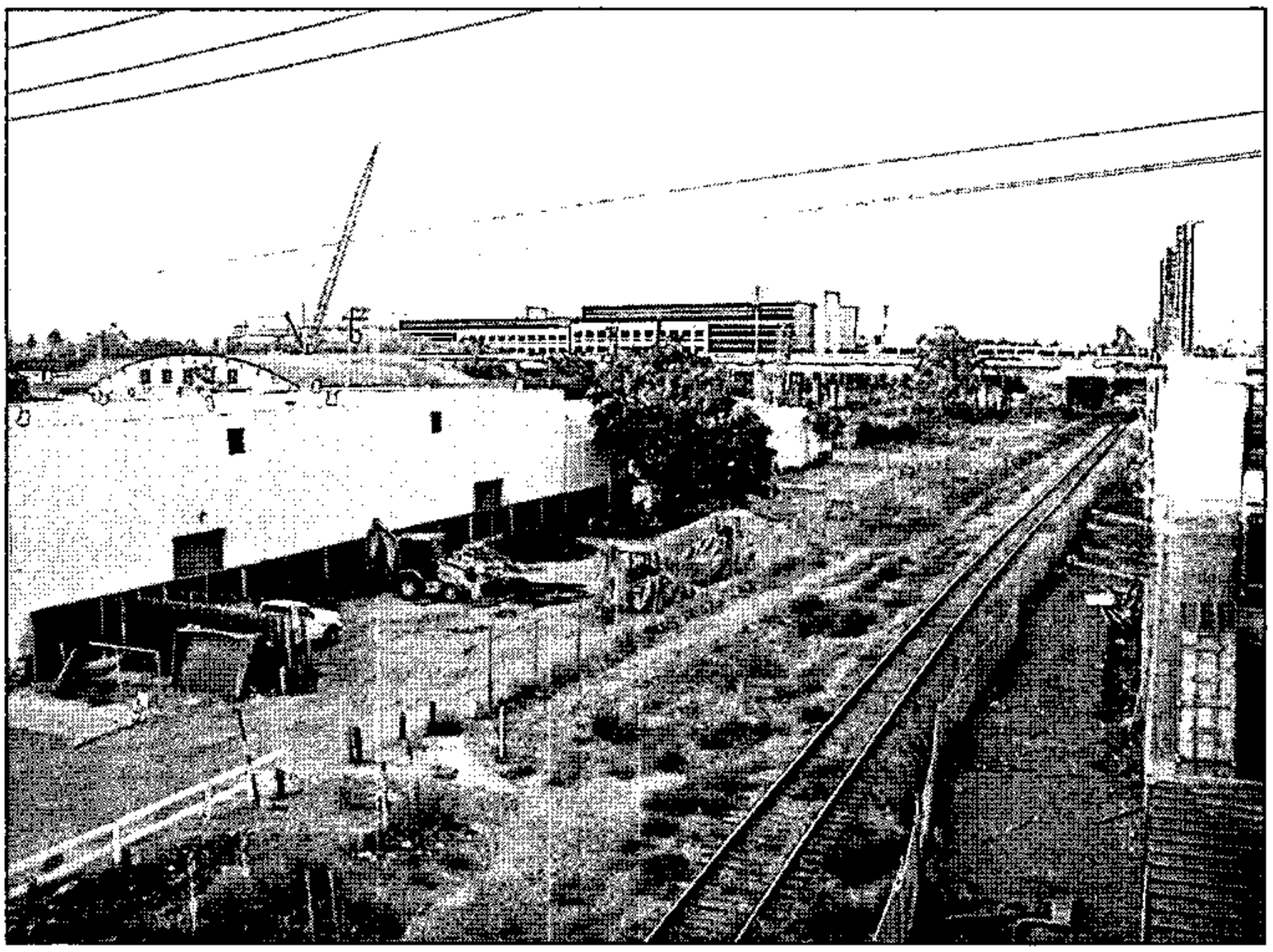

Figure V.A-4: View of Northern Edge of Project Site, Looking Southwest from Market Street/Coleman Avenue Overpass.

Figure V.A-5: View of Adjacent Property, Corner of W. St. James and N. San Pedro Streets, looking at Project site (in left background)

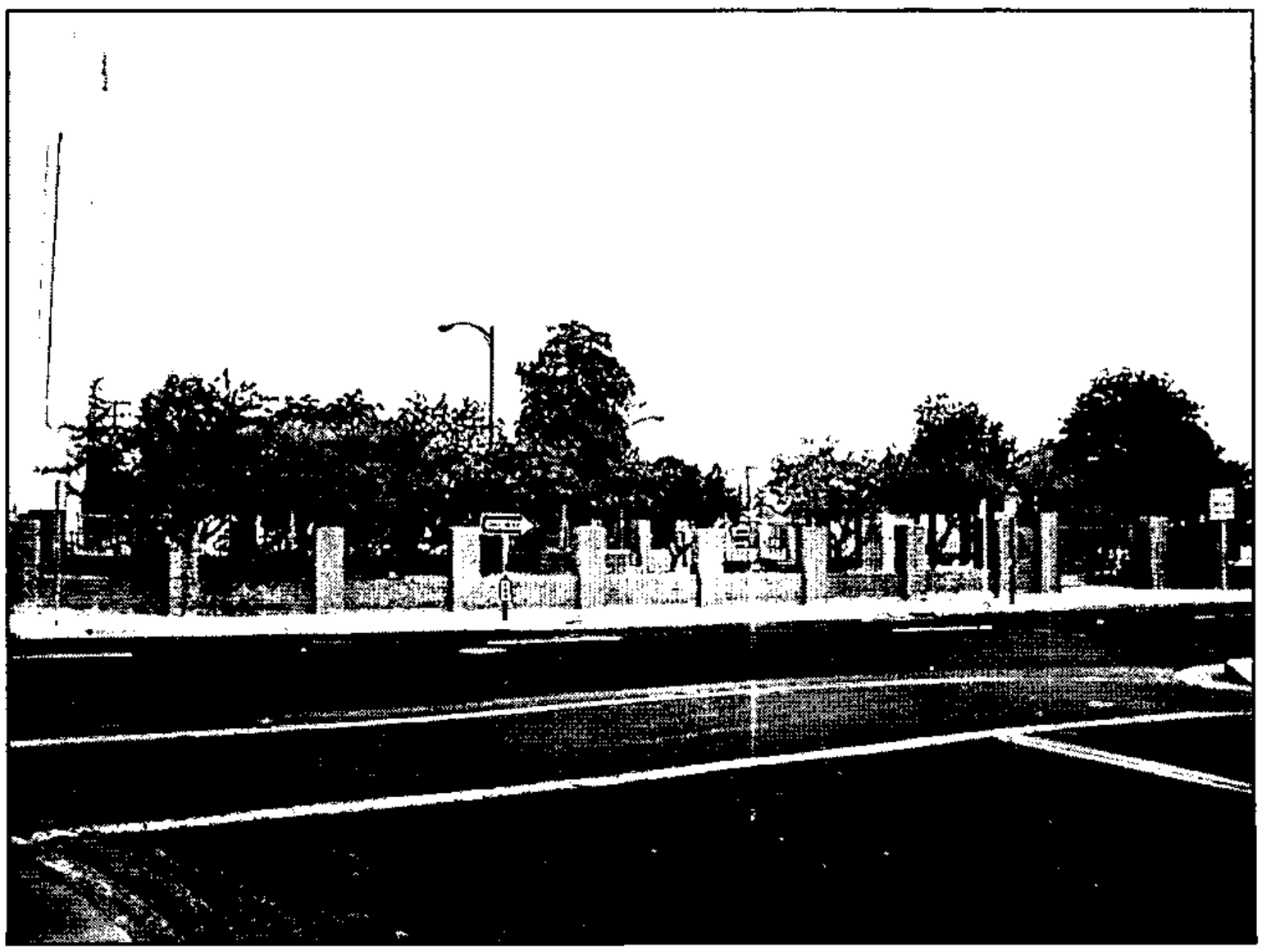

Figure V.A-6: View of Pellier Park, Looking North from Terraine Street

LSA

FIGURE V.A-7

PROJECT SITE

0 300 600
FEET

Brandenburg Mixed Use Project/
North San Pedro Housing Sites
Aerial of Existing Conditions

SOURCE: CITY OF SAN JOSE, 2003.

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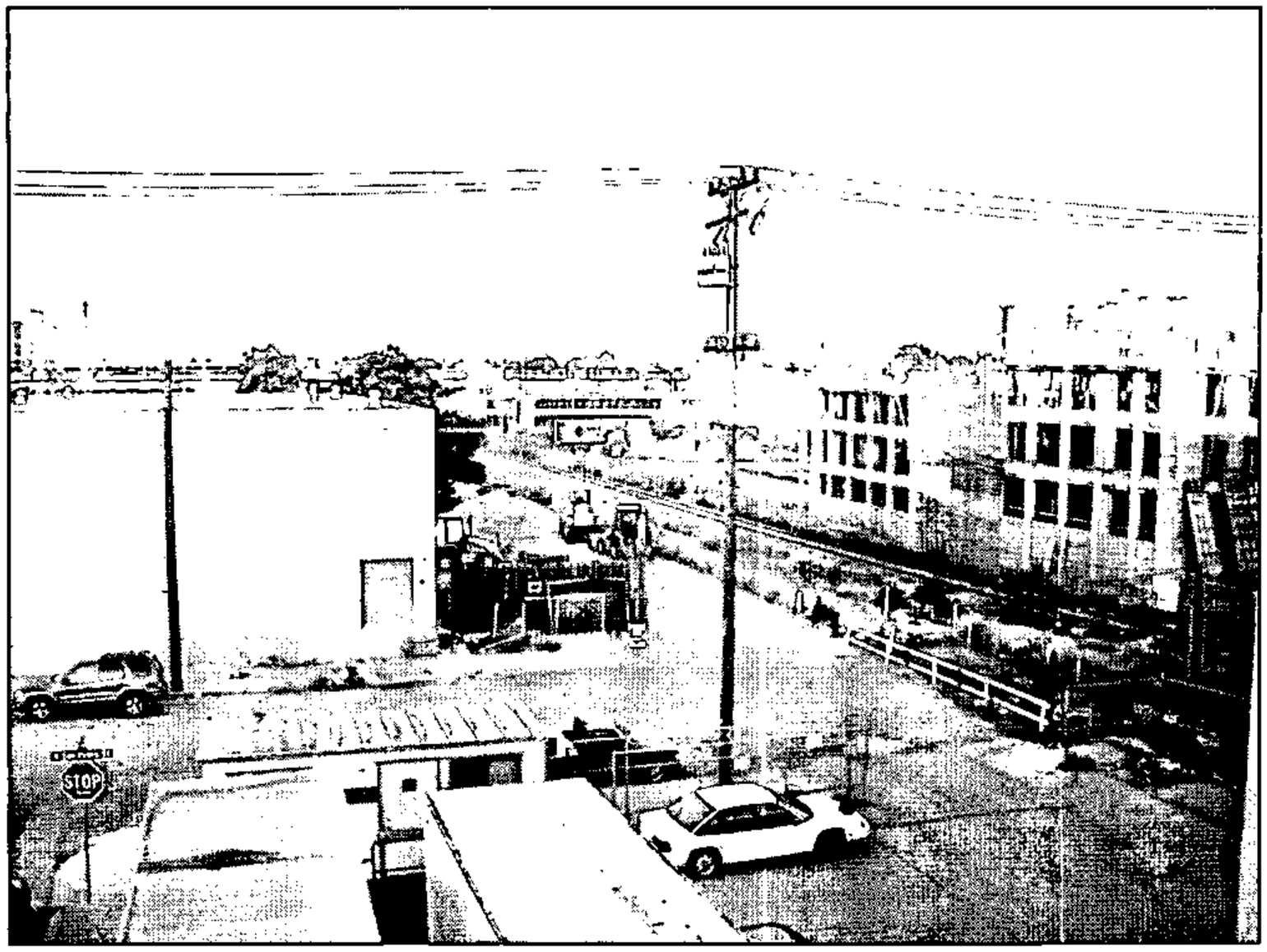


Figure V.A-8: View of Northern Edge of Project Site and Residential Development to the North (circa October 2002)

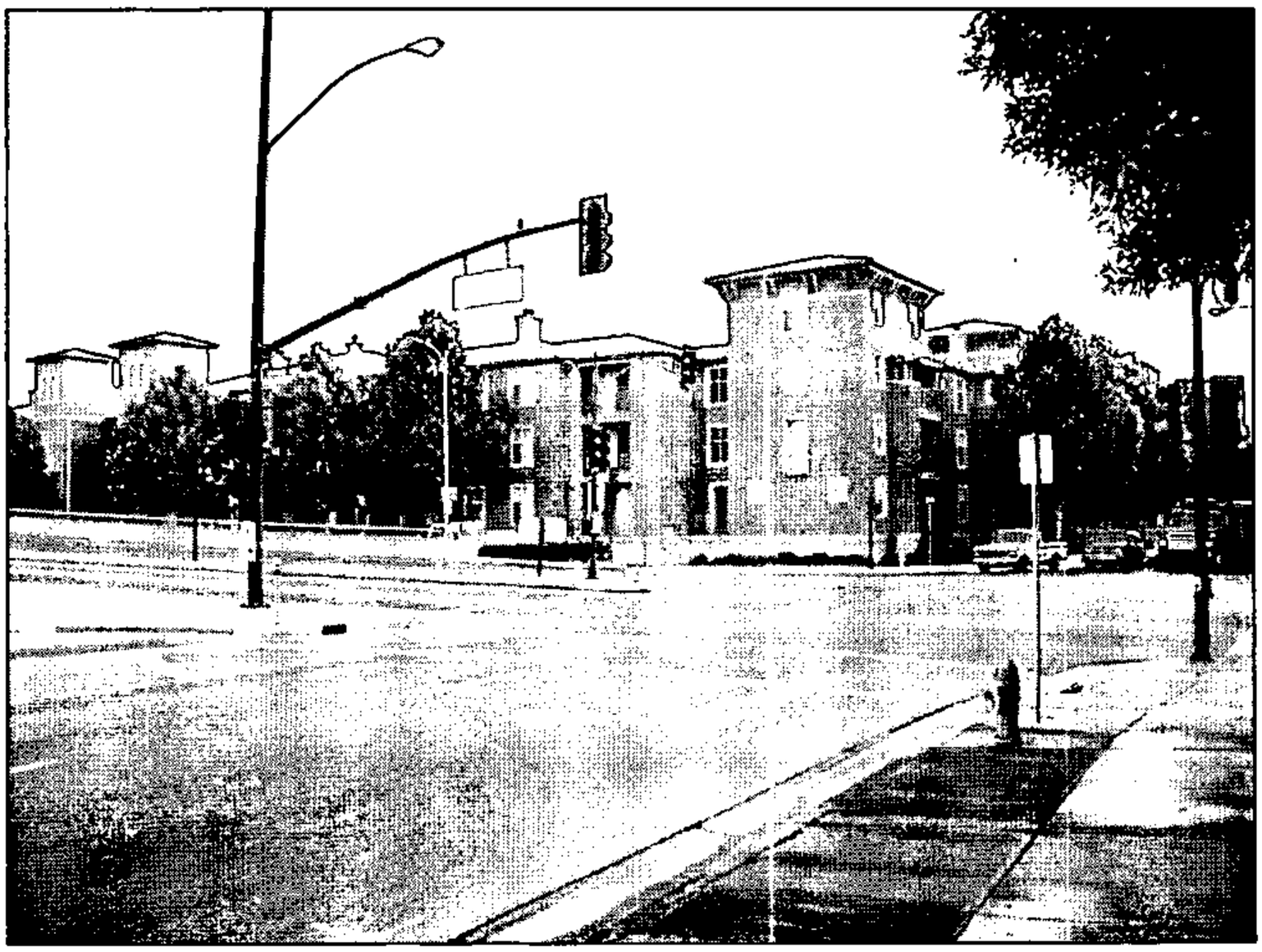


Figure V.A-9: View of Residential Development, East of Project Site

offices. A restaurant is located on the northwest corner of Devine Street and 1st Street. A parking lot occupies most of the block southeast of the project site on the northeast corner of East St. James Street and Market Street.

(3) Land Uses to the South. A fire station and auxiliary building is located south of the project site, east of North San Pedro Street. Further south of the project site beyond the fire station is a multi-story office building and employee parking lot. On the northwest corner of East St. James Street and North San Pedro Street a Victorian house has been converted to law offices and includes a private parking lot. A nightclub, an attendant operated parking facility, and an historic building occupy the block bounded by East St. James Street, North San Pedro Street, Terraine Street, and West St. John Street. Adjacent to the project site's southwest corner is the Superior Court Terraine Courthouse.

(4) Land Uses to the West. Excluding the multi-story office building adjacent to the project site's southwestern edge, the land use directly west of the project site is traffic circulation infrastructure. Further west beyond the Guadalupe Parkway, land uses are consistent with a built-up downtown urban setting. Multi-story office uses are dominant in the area west of the project site.

d. Planned Projects in the Vicinity of the Proposed Project. Several projects planned for, or under construction in, the general vicinity of the proposed project site are described in Chapter VI, Cumulative Impacts and shown in Figure VI-1. The nearest of these are the Regis Housing project (38 single-family units) on East Julian at 1st Street, and the Classic Communities project (42 single-family units) across the railroad tracks, north of the project site and east of Coleman Avenue. Several blocks south of the project site (south of East Santa Clara Street) three large mixed use projects are planned: San Jose Water Company site (up to 1.025 million square feet of commercial and retail uses and 325 residential units); Greyhound site (250 residential units and 20,000 square feet of retail uses); and the Heart of the City project by the CIM Group LLC (approximately 174 residential units and 32,250 square feet of retail uses). Well north of the project site, across Coleman Avenue from the San Jose International Airport is the FMC office/research & development project (up to 3.0 million square feet).

2. Impacts and Mitigation Measures

The following section presents a discussion of the impacts related to land use that could result from the implementation of the proposed Brandenburg Mixed Use Project. The section begins with the criteria of significance, establishing the thresholds to determine whether an impact is significant. The latter part of this section presents the land use impacts from the proposed project and mitigation measures, if required. Impacts are delineated into separate categories based on their significance according to the criteria listed below: less-than-significant impacts, which do not require mitigation, and significant impacts, which do require mitigation.

Whereas this section of Chapter V (A. Land Use) addresses issues of land use compatibility, the related issues of Aesthetics and Shade and Shadow effects are separately addressed in sections that follow (Chapter V.E and V.F).

a. Criteria of Significance. The Brandenburg Mixed Use Project would have a significant adverse impact if it were to cause any of the following:

- Disrupt or divide the physical arrangement of an established community;
- Produce substantial light or glare such that it poses a hazard or nuisance;
- Introduce new land uses that would conflict with established and/or proposed uses; or
- Conflict with applicable land use plans or policies adopted by agencies with jurisdiction over the project (including, but not limited to the specific plans or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect.

b. Less-than-Significant Land Use Impacts. Less than significant impacts of the proposed project arise under three topics: (1) divide or disrupt an established community; (2) Julian Street realignment; and (3) acquisition and relocation of businesses.

(1) Divide or Disrupt an Established Community. Located as it is on the northern edge of the gradually redeveloping downtown area, and bounded to the west by the elevated Guadalupe Parkway and to the north by the railroad right-of-way, the proposed development would not disrupt or divide the physical arrangement of an established community. Instead it would continue a pattern of land use change in the area from older commercial and industrial uses toward medium to high density housing. It could also facilitate the northward extension of existing retail uses along North San Pedro Street south of the project area.

The development is strategically located to extend and connect surrounding residential and retail uses by its presence. It will connect and complete a community now torn by street and transportation layouts, vacant land and older industrial and commercial uses. The development not only adds retail amenities for residents, but also provides a customer population for the retail amenities along North San Pedro Street, just south of the project area, and a pleasant residential area for neighbors from adjacent developments to walk through on their way to North San Pedro Street.

(2) Julian Street Realignment. The realignment of Julian Street to match the historic grid pattern of right angle streets that otherwise prevails in the neighborhood would not appear to create incompatibilities between established and proposed uses within or adjacent to the project site. Once a specific development project (or projects) is proposed, the precise site planning relationship between the new development and the existing office land use northwest of Pellier Park (known as the Davidson Building) would be refined. The same holds true for Pellier Park itself and the new development that would occur on the southeast corner of Devine Street and Terraine Street. Nothing about the basic plan to realign the curved portion of Julian Street between Market Street and Terraine Street would create land use incompatibility impacts, however.

(3) Acquisition and Relocation of Businesses. The proposed project may require the consolidation or acquisition of properties within the project area in order to accommodate new development or to facilitate planned roadway and sidewalk improvements. This may involve Redevelopment Agency assistance in land assembly on a limited basis. Acquisition of real property may occur by purchase, gift, exchange, condemnation or any other lawful means. The Agency entered into a Purchase Agreement with the Brandenburg Family Trust to acquire 5.26 acres of property. Relocation efforts for the four tenants located in these properties are currently underway. The sale of these holdings is expected to close early in the Fall of 2003. While these procedures, as well as any future relocations, could affect existing businesses, the City of San Jose and the Redevelopment Agency are required to comply with provisions of California Redevelopment Law, State Relocation Assistance

Policies and the provisions set forth in the Julian Stockton Redevelopment Plan. These provisions and policies include noticing requirements and relocation assistance to both owners and renters of property. Because these existing legal protections and forms of financial assistance are in place and would reduce any potential environmental impacts, no further mitigation measures are necessary in this EIR.

c. Significant Land Use Impacts. Significant land use impacts arise under three categories: (1) land use compatibility issues related to light and glare; (2) land use compatibility issues related to proximity of nearby elevated roadways and railroad line; and (3) land use compatibility issues related to the proximity of the project to the San Jose International Airport.

(1) **Light and Glare.** Increased building heights within the project site would increase the potential for adverse light and glare impacts in three ways: (1) exterior lighting on taller structures sheds light over a wider area; (2) taller building facades add to the potential for reflected light and glare to be visible over greater distances; and (3) windows in the upper stories would emit more light and over a wider area.

Presently, the small number of buildings on the site are no more than two stories tall and do not include many exterior lights, reflective building materials, or windows in the second stories that emit significant amounts of interior light. Structures adjacent to the project site, such as the Davidson office building (near the southwest quadrant of the project site) and the recently constructed multi-family housing across Market Street (to the east of the project site) range from three to six stories and include design elements and building materials of the type that already create at least moderate light and glare effects on properties in the vicinity of the site.

Impact LU-1: The introduction of new buildings on 14 of the 16 parcels composing the project site, at heights of up to 173 feet above ground level, has the potential to result in light spillover onto adjacent properties and increased reflected glare. (S)

The following two-part mitigation measure would ensure that potential light and glare impacts would be reduced to less-than-significant levels.

Mitigation Measure LU-1a: The City shall continue to implement the following 2020 General Plan goals and policies that relate to the land use compatibility aspects of light and glare:

- New Residential development should be oriented and designed to protect residents from any potential conflicts with adjacent land uses.
- *Urban Design Policy 1* – The City should continue to apply strong architectural and site controls on all types of development for the protection and development of neighborhood character and for the proper transition between areas with different types of land uses.
- *Urban Design Policy 22* – Design guidelines adopted by the City Council should be followed in the design of development projects.

Mitigation Measure LU-1b: The City shall continue to implement Council Policy 4-3 which encourages the use of low-pressure sodium lighting for outdoor uses. (LTS)

(2) Proximity of Nearby Elevated Roadways and Railroad Line to Project Housing. The project site is located between two elevated roadways: SR 87 to the west and the Market Street/ Coleman Avenue overpass to the east. Developing housing near an elevated roadway increases the exposure of the new dwelling units to both light and glare, visual intrusion, litter, dust and odors from passing vehicles.

Similar to the general land use incompatibilities that could arise where elevated roadways are near to residential land uses, the introduction of residential uses near to the adjacent railroad right-of-way could result in conflicts. While the multi-block project site itself has historically been an industrial area, many properties surrounding the project site have transitioned to residential uses in recent years. The historic industrial operations of the area have been served by several railroad lines and spurs crossing the area, one of which is located immediately north of the project site. Rail operations along that corridor could continue into the future and several types of incompatibilities could result: safety conflicts, fugitive dust, litter, noise and vibration.

These effects are examples of general land use incompatibilities that can occur where transportation systems and residential land use meet. (Air pollution and noise from the elevated roadways and railroad line could also be a problem and are specifically addressed in this chapter in sections V.C. Air Quality and V.D. Noise.)

Impact LU-2: Developing housing near the two elevated roadways and adjacent to the railroad line could expose future residents to land use incompatibilities. (S)

Mitigation Measure LU-2: The City shall continue to implement the following 2020 General Plan goals and policies that relate to the land use compatibility and design aspects of nearby roads, freeways and railroad rights-of-way:

- New Residential development should be oriented and designed to protect residents from any potential conflicts with adjacent land uses.
- *Urban Design Policy 1* – The City should continue to apply strong architectural and site controls on all types of development for the protection and development of neighborhood character and for the proper transition between areas with different types of land uses.
- *Urban Design Policy 22* – Design guidelines adopted by the City Council should be followed in the design of development projects.
- *Parks and Recreation Policy 2* – Public parks, open space lands and other similar public areas should be located, oriented and designed in such a way as to facilitate their security and policing. (LTS)

(3) Airport Compatibility. The project site is subject to a series of policies and evaluations due to its proximity to the flight paths of the San Jose International Airport. The *Land Use Plan for Areas Surrounding Santa Clara County Airports* (ALUC) and the City General Plan (Aviation) Policies #38, #39 and #40 require that airspace required for safe operation of the airport be maintained and that aviation easement dedications be required for development in the vicinity of airports. As noted in Chapter IV, the subject General Plan amendment and rezoning will be referred to the ALUC for determination of consistency with the policies in the ALUC Land Use Plan. The ALUC would then have 60 days to provide that determination of whether the project is consistent with its Plan.

Policy #38 requires the project to be in compliance with the guidelines of the Federal Aviation Administration (FAA). Federal Aviation Regulations, Part 77, "Objects Affecting Navigable Airspace" (referred to as FAR Part 77) set forth standards and review requirements for protecting the airspace for safe aircraft operation, particularly by restricting the height of potential structures and minimizing reflective surfaces, flashing lights, electronic interference and other potential hazards to aircraft in flight. These regulations require that the FAA be notified of certain proposed construction projects within an extended zone defined by a set of imaginary surfaces radiating outward for several miles from the airport's runways. These standards limit structures on the project site to a maximum of 208 feet above mean sea level. Pursuant to Part 77 of the Federal Aviation Regulations, any proposed structure which would exceed an FAA imaginary surface must be submitted to the FAA for an aeronautical study to determine whether the specific structure would constitute a hazard to aircraft.

Impact LU-3: Construction of buildings at heights that would exceed the FAA's imaginary surface restriction of 208 feet above mean sea level (which includes any buildings reaching 173 feet above ground level) could result in hazards to safe operation of the San Jose International Airport. (S)

Mitigation Measure LU-3: Prior to the issuance of a building permit for any project structures that would exceed the FAA imaginary surface applicable to the project site, the following actions should be accomplished:

- The applicant shall comply with the notification requirements of Federal Aviation Regulations, Part 77, and receive a "Determination of No Hazard" from the FAA.
- Conditions set forth in the required FAA determination of No Hazard regarding roof-top lighting or marking shall be incorporated into the final design of the structure.
- Avigation easements (recognizing that the property is subject to aircraft noise impacts and specified height restrictions) shall be dedicated to the City of San Jose. (LTS)

B. TRANSPORTATION AND CIRCULATION

The following discussion of transportation is based upon a traffic analysis prepared for the project by Hexagon Transportation Consultants, Inc. A copy of the traffic analysis is provided in Appendix B.1 of Volume 2 of this EIR. The purpose of the traffic analysis was to identify the potential traffic impacts of the proposed mixed use development, according to the standards and methodologies of the City of San Jose and the Santa Clara Valley Transportation Authority (VTA). The VTA administers the County Congestion Management Program (CMP).

1. Introduction

This section presents the results of the traffic impact analysis conducted for the proposed project. Different street layouts that would modify the existing roadway network at the project site are being considered. The purpose is to design a roadway network that will provide better access and safety to and around the project site. The roadways that mainly would be affected by such modifications are Julian Street, Terraine Street, Devine Street and possibly St. James Street within the project area. (See Figure III-3 for an illustration of the existing curved Julian Street and Figure V.B-3 for the proposed street layout).

The project proposes to remove the curved portion of the existing Julian Street and replace it with a straight extension connecting to the west with Terraine Street. Terraine Street would be extended to St. James Street, and Devine Street to Terraine Street, forming a grid system roadway network. The project would create a new intersection at Terraine Street and Julian Street. South of this intersection, Terraine Street would become a one-way southbound street. Julian and Terraine Streets would then become a one-way arterial moving traffic westward. The project would also involve the installation of at least 3 new traffic signals at the new intersections on Julian and Terraine Streets.[1]

Only the on-site intersections and those immediately surrounding the project area would be affected by the proposed street layouts, since traffic coming to and leaving the project site would continue using the same routes outside the project area.

a. Scope of Study. This study was conducted for the purpose of identifying the potential traffic impacts related to the proposed development. Project impacts within the City of San Jose are evaluated following the standards and methodologies set forth by the City of San Jose and the Congestion Management Program (CMP) of the Santa Clara Valley Transportation Authority (VTA). Part of this project is located within the downtown core (defined by the area formed by I-280, SR 87, Bassett Street, Julian Street, and Fourth Avenue) which is exempt from the City of San Jose level of service policy. Nevertheless, for this analysis, all the study intersections (see Figure V.B-1) were evaluated under both the City of San Jose and the CMP level of service standards.[2]

The traffic analysis is based on peak-hour levels of service for signalized intersections and freeway segments. It also includes an evaluation of peak-hour signal warrants for the study unsignalized and future intersections and a vehicle queuing analysis for selected locations. The traffic analysis is based on AM and PM peak-hour levels of service for twenty-three signalized intersections, four existing

[1] A second realignment design, with St. James Street as a two-way local street (referred to as Variant 2) is analyzed in the Traffic Analysis (see Appendix B-1), but is not part of the proposed project.

[2] All proposed developments will require additional traffic study to address driveway operation, queuing analysis, circulation, pedestrian circulation and updated level-of-service calculations.

unsignalized intersections, three future intersections, and eighteen freeway segments. The study intersections and freeway segments are identified below.

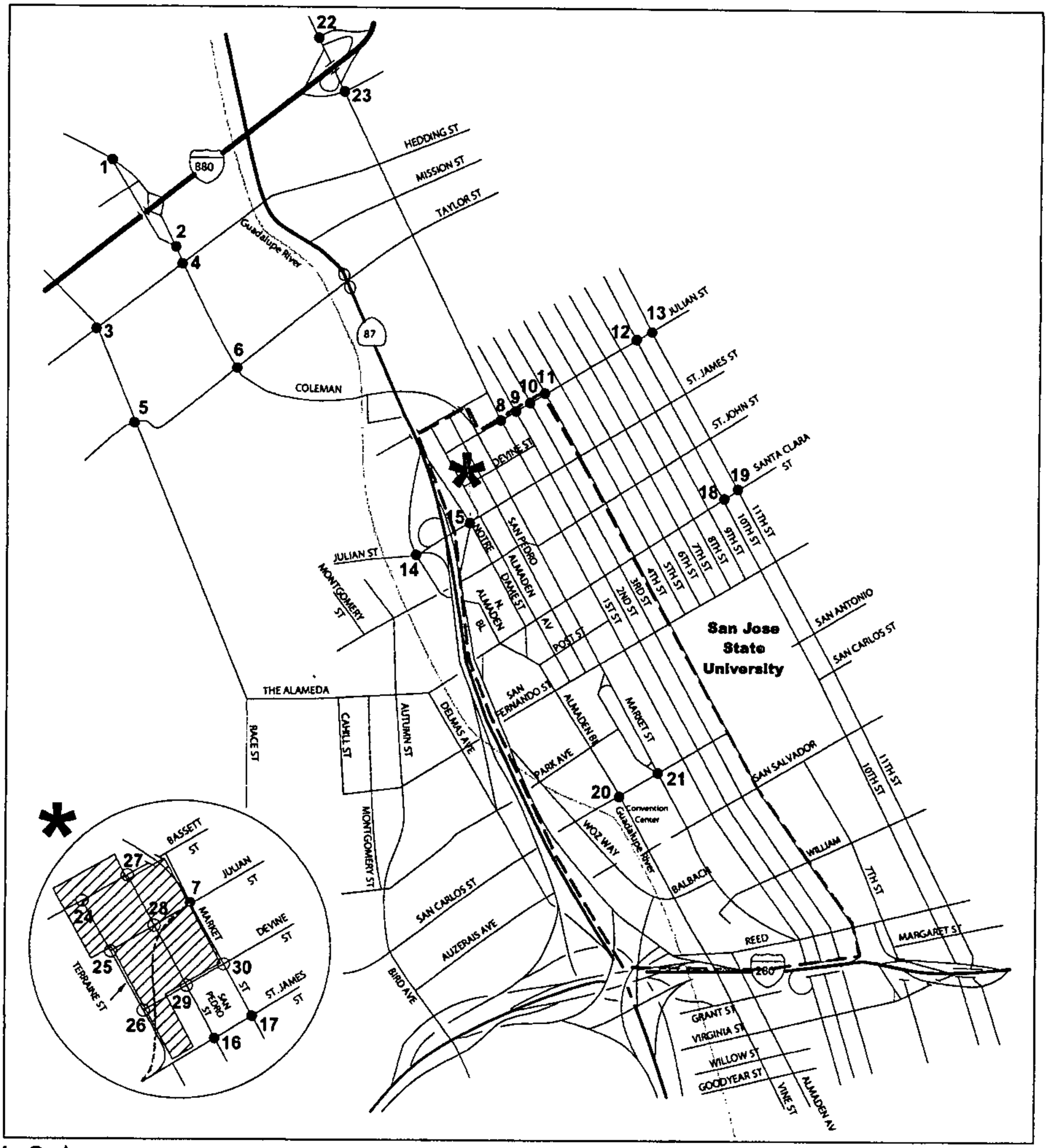
Study Intersections

- I-880 and Coleman Avenue (N)*
- I-880 and Coleman Avenue (S)*
- The Alameda and Hedding Street*
- Coleman Avenue and Hedding Street
- The Alameda and Naglee Avenue/Taylor Street*
- Coleman Avenue and Taylor Street
- Market Street and Julian Street
- First Street and Julian Street
- Second Street and Julian Street
- Third Street and Julian Street
- Fourth Street and Julian Street
- Tenth Street and Julian Street
- Eleventh Street and Julian Street
- SR 87 and Julian Street (W)*
- SR 87 and Julian Street (E)*
- San Pedro Street and St. James Street
- Market Street and St. James Street
- Tenth Street and Santa Clara Street
- Eleven Street and Santa Clara Street
- Almaden Boulevard and San Carlos Street*
- Market Street and San Carlos Street*
- First Street and I-880 (N)*
- First Street and I-880 (S)*
- Terraine Street and Bassett Street (Existing Unsignalized)
- Terraine Street and Julian Street (Future)
- Terraine Street and Devine Street (Future)
- San Pedro Street and Bassett Street (Existing Unsignalized)
- San Pedro Street and Julian Street (Future)
- San Pedro Street and Devine Street (Existing Unsignalized)
- Market Street and Devine Street (Existing Unsignalized)

CMP intersections are denoted with an asterisk (*).

Study Freeway Segments

- I-880, Bascom Avenue to The Alameda
- I-880, The Alameda to Coleman Avenue
- I-880, Coleman Avenue to SR 87
- I-880, SR 87 to North First Street
- I-880, North First Street to US 101
- SR 87, SR 85 to Capitol Expressway
- SR 87, Capitol Expressway to Curtner Avenue
- SR 87, Curtner Avenue to Almaden Expressway



LSA

FIGURE V.B-1

LEGEND

NOT TO SCALE

DOWNTOWN CORE BOUNDARY

SIGNALIZED STUDY INTERSECTIONS

UNSIGNALIZED/FUTURE STUDY INTERSECTIONS

PROJECT SITE LOCATION

PROJECT AREA

Brandenburg Mixed Use Project/
North San Pedro Housing Sites
Study Intersections

SOURCE: HEXAGON TRANSPORTATION CONSULTANTS, INC., 2003

I:\IMAGES\GRAPHICS\JOBS\SJO230 BRANDENBURG\FIGURES\FIG_V.B1.AI (07/28/03)

- SR 87, Almaden Expressway to Alma Avenue
- SR 87, Alma Avenue to I-280
- SR 87, I-280 to Julian Street
- SR 87, Julian Street to Coleman Avenue
- I-280, US 101 to McLaughlin Avenue
- I-280, McLaughlin Avenue to Tenth Street
- I-280, Tenth Street to SR 87
- I-280, SR 87 to Bird Avenue
- I-280, Bird Avenue to Meridian Avenue
- I-280, Meridian Avenue to I-880

Traffic conditions at the intersections were analyzed for the weekday AM and PM peak hours of traffic. The AM peak hour of traffic is generally between 7:00 and 9:00 a.m., and the PM peak hour is typically between 4:00 and 6:00 p.m. It is during these periods that the most congested traffic conditions occur on an average day.

Traffic conditions were evaluated for the following scenarios:

Scenario 1: *Existing Conditions.* Existing traffic volumes were obtained from recent traffic counts and the City of San Jose. (It should be noted that the vacancy rate for office space in Downtown San Jose has been estimated at over 20 percent for the first and second quarters of 2003, which is a relatively high level.)[3]

Scenario 2: *Background Conditions.* Background traffic volumes were estimated by adding to existing peak-hour volumes the projected volumes from approved but not yet completed developments. The latter component is contained in the City of San Jose Approved Trips Inventory (ATI).

Scenario 3: *Project Conditions.* Future traffic volumes with the project (hereafter called *project traffic volumes*) were estimated by adding to background traffic volumes the additional traffic generated by the project. Project conditions were evaluated relative to background conditions in order to determine potential project impacts.

Scenario 4: *Cumulative Conditions.* Cumulative conditions represent the future traffic volumes, at the date of project occupancy, on the near-term future roadway network. Traffic volumes under cumulative conditions were estimated by applying a growth factor of 1.2 percent per year to the existing volumes, adding trips from approved developments and proposed future projects, and adding project trips. The proposed future projects incorporated into the cumulative scenario are: (1) the Heart of the City (CIM) project, (2) the San Jose Water Company, and (3) the Greyhound Site Redevelopment project. This scenario is evaluated in fulfillment of CMP requirements.

2. Methodology

This section presents the methods used to determine the traffic conditions for each scenario described above. It includes descriptions of the data requirements, the analysis methodologies, and the applicable level of service standards.

[3] "Office Vacancy Rates Climbing for Downtown," in Silicon Valley/San Jose Business Journal, November 2002; and Ritchie Commercial, 2003.

a. Data Requirements. The data required for the analysis were obtained from the City of San Jose and the CMP Annual Monitoring Report. The following data were collected from these sources:

- existing traffic volumes
- lane configurations
- signal timing and phasing
- traffic speeds (for freeway segments)

b. Analysis Methodologies and Level of Service Standards. Traffic conditions at the study intersections were evaluated using level of service (LOS). *Level of Service* is a qualitative description of operating conditions ranging from LOS A, or free-flow conditions with little or no delay, to LOS F, or jammed conditions with excessive delays. Signalized study intersections located in the City of San Jose are usually subject to both the City of San Jose and CMP Level of Service standards. Both analysis methods are described below.

(1) City of San Jose Signalized Intersections. The City of San Jose level of service methodology is TRAFFIX, which is based on the *Highway Capacity Manual* (HCM) method for signalized intersections. TRAFFIX evaluates signalized intersection operations on the basis of average delay time for all vehicles at the intersection. Since TRAFFIX is also the CMP-designated intersection level of service methodology, the City of San Jose methodology employs the CMP default values for the analysis parameters. The City of San Jose level of service standard for signalized intersections is LOS D or better. The correlation between average delay and level of service is shown in Table V.B-1.

(2) CMP Intersections. Since TRAFFIX is the designated level of service methodology for both the CMP and the City of San Jose, the CMP study intersections are not analyzed separately, but rather are among the City of San Jose signalized study intersections analyzed using TRAFFIX. The only difference between the San Jose and CMP analyses is that project impacts are determined on the basis of different level of service standards –the CMP level of service standard for signalized intersections is LOS E or better.

(3) Freeway Segments. As prescribed in the CMP technical guidelines, the level of service for freeway segments is estimated based on vehicle density. Density is calculated by the following formula:

$$D = V / (N*S)$$

where:

D = density, in vehicles per mile per lane (vpmpl)
V = peak hour volume, in vehicles per hour (vph)
N = number of travel lanes
S = average travel speed, in miles per hour (mph)

The vehicle density on a segment is correlated to level of service as shown in Table V.B-2. The CMP requires that mixed-flow lanes and auxiliary lanes be analyzed separately from HOV (carpool) lanes. The CMP specifies that a capacity of 2,300 vehicles per hour per lane (vphpl) be used for segments six lanes or wider in both directions and a capacity of 2,200 vphpl be used for segments four lanes wide in both directions. The CMP defines an acceptable level of service for freeway segments as LOS E or better.

Table V.B-1: Intersection Level of Service Definitions Based on Delay

Level of Service	Description	Average Stopped Delay Per Vehicle (Sec.)
A	Operations with very low delay occurring with favorable progression and/or short cycle lengths.	Less than 5.0
B	Operations with low delay occurring with good progression and/or short cycle lengths.	5.1 to 15.0
C	Operations with average delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures begin to appear.	15.1 to 25.0
D	Operations with longer delays due to a combination of unfavorable progression, long cycle lengths, or high V/C ratios. Many vehicles stop and individual cycle failures are noticeable.	25.1 to 40.0
E	Operations with high delay values indicating poor progression, long cycle lengths, and high V/C ratios. Individual cycle failures are frequent occurrences. This is considered to be the limit of acceptable delay.	40.1 to 60.0
F	Operation with delays unacceptable to most drivers occurring due to oversaturation, poor progression, or very long cycle lengths.	Greater than 60.0

Source: Transportation Research Board, Highway Capacity Manual, Special Report 209 (Washington, D.C., 1985), pp. 9-4, 9-5.

(4) Unsignalized Intersections. For unsignalized intersections an assessment is made of the need for signalization of the intersection. This assessment is made on the basis of the Peak-Hour Volume Signal Warrant, Warrant #11 described in the Caltrans *Traffic Manual*. This method makes no evaluation of intersection level of service, but simply provides an indication of whether peak-hour traffic volumes are, or would be, sufficient to justify installation of a traffic signal.

Table V.B-2: Freeway Segment LOS Definitions Based on Density

Level of Service	Density (vehicles/mile/lane)
A	< 10.0
B	10.1 – 16.0
C	16.1 – 24.0
D	24.1 – 46.0
E	46.1 – 55.0
F	>55

Source: Hexagon Transportation Consultants, 2003.

(5) Intersection Operations. The operations analysis is based on vehicle queuing for high-demand turning movements at intersections. The basis of the analysis is as follows: (1) the TRAFFIX intersection analysis software is used to estimate the 95th percentile maximum number of queued vehicles per signal cycle for a particular movement; (2) the estimated maximum number of vehicles in the queue is translated into a queue length, assuming 20 feet per vehicle; and (3) the estimated maximum queue length is compared to the existing or planned available storage capacity for the movement. This analysis thus provides a basis for estimating future storage requirements at intersections.

2. Existing Setting

This section describes the existing conditions for all of the major transportation facilities in the vicinity of the site, including the roadway network, transit service, and bicycle and pedestrian facilities.

a. Existing Roadway Network. Regional access to the project site is provided via I-280, I-880, and SR 87. These facilities are described below.

- *I-280* is generally an eight-lane freeway in the vicinity of downtown San Jose. It extends from US 101 in San Jose to I-80 in San Francisco. Just north of the Bascom Avenue overcrossing, I-280 consists of three mixed-flow lanes and one high-occupancy vehicle (HOV) lane in each direction to the north, and four mixed-flow lanes in each direction to the south. Access to I-280 to and from the project site is provided via SR 87.
- *I-880* connects from I-280 (where it changes designation to SR 17 heading toward Santa Cruz) and proceeds north to I-80 in Oakland. It generally has six lanes through San Jose. I-880 lies somewhat north of downtown San Jose, but has connections via interchanges at Coleman Avenue and at First Street.
- *SR 87 (Guadalupe Parkway)* is a north-south four-lane freeway in the vicinity of the site. It extends from SR 85 in south San Jose to US 101 in north San Jose. North of Taylor, SR 87 becomes an at-grade arterial street with signalized intersections. The segment of SR 87 between Taylor Street and US 101 will be upgraded to a six-lane freeway as part of the Route 87 freeway upgrade project. Access to SR 87 to and from the project site is provided via its interchange at Julian Street.

Local access to the site is provided by the following roadways:

- *Market Street* is a north-south four-lane roadway that runs from Julian Street to Reed Street. North of Julian Street, Market Street becomes Coleman Avenue. South of Reed Street, Market Street becomes South First Street. Being the east project site boundary, it also provides direct access to blocks composing the project site.
- *Julian Street* is a one-way westbound two-lane arterial within the downtown core area. West and east of the downtown core at SR 87 and 17th Street, respectively, Julian Street is generally a two-way two-lane roadway. In addition to providing direct access to blocks composing the project site, Julian Street also provides regional access through its full interchange with SR 87.
- *North First Street* is a north-south, one-lane, one-way northbound roadway between San Carlos Street and Julian Street. From San Carlos to Julian Street, the Guadalupe LRT line runs along the right side of First Street. North of Julian Street, First Street transitions from a one- to a two-lane roadway that is divided by the Guadalupe LRT line and extends to north San Jose. South of San Carlos Street, First Street transitions from a one- to a two-lane roadway and becomes Monterey Road.
- *Santa Clara Street* is a four-lane east-west arterial that provides access from the east and west of the downtown area. East of US 101, Santa Clara Street becomes Alum Rock Avenue and west of SR 87 it becomes The Alameda.
- *Almaden Boulevard* is a six-lane north-south arterial that runs from Julian Street to I-280. South of I-280, Almaden Boulevard provides access to and from the south via its connections to Vine Street and Almaden Avenue.

b. Existing Bicycle and Pedestrian Facilities. There are several bikeways within the vicinity of the project site. There is a multi-use trail along the Guadalupe River. This path is for the use of bicycles and pedestrians. Also, bike lanes are provided on Seventh Street with bike routes heading east from Seventh Street along Julian, St. James, and San Carlos Streets. The streets within the downtown, including the project area, generally have sufficient curb lane width to accommodate bicycles.

Pedestrian facilities in the project area consist primarily of sidewalks along the streets. Sidewalks are found along all previously-described local roadways in the study area. However, pedestrian access to the site is difficult under existing conditions. Julian Street is relatively wide and has fast moving traffic; there are no safe pedestrian crossings along Julian Street from Market Street to SR 87. Even the signalized crossing at Market/Julian is difficult because of the free-running right turn lane from southbound Market Street to westbound Julian Street.

c. Existing Transit Service. Existing transit service to the study area is provided by the VTA and by CalTrain. These are described below.

(1) VTA Transit Service.

Bus Service. The study area is served by twelve local bus routes, with bus stops located along First Street and Second Street, between Julian Street and St. James Street. The **22 line** provides service between Eastridge and the Palo Alto/Menlo Park CalTrain station with 10-minute headways during commute hours. The **23 line** provides service between downtown San Jose and the San Antonio Shopping Center with 15- to 30-minute headways during commute hours. The **64 line** provides service between the Almaden LRT station and Alum Rock/Miguelito with 15-minute headways during commute hours. The **66 line** provides service between Santa Teresa Hospital and Milpitas with 15-minute headways during commute hours. The **68 line** provides service between the San Jose Diridon CalTrain station and Gavilan College in Gilroy with 15-minute headways during commute hours. The **72 line** provides service between downtown San Jose and the Santa Teresa LRT station with 15- to 30-minute headways during commute hours. The **73 line** provides service between downtown San Jose and Snell/Capitol Expressway with 20-minute headways during commute hours. The **82 line** provides service between Westgate and Hedding/Seventeenth Street with 30-minute headways during commute hours. The **85 line** provides service between Lawrence Expressway/ Moorpark and Tenth Street/Hedding with 30-minute headways during commute hours. The **300 line** provides service between East San Jose and the Palo Alto CalTrain station with 20- to 30-minute headways during commute hours. The **304 line** provides service between South San Jose and Mountain View with 15- to 30-minute headways during commute hours. The **305 line** provides service between South San Jose and Mountain View with 60-minute headways during commute hours.

The study area is also served by one express bus route. Express bus 180 operates on 15- to 20-minute headways during commute hours between the San Jose Diridon CalTrain station and the Fremont BART station.

The above bus routes are summarized in Table V.B-3.

Light Rail Transit (LRT) Service. The VTA Light Rail provides service from the Santa Teresa/ Almaden station to Great America. There is one LRT station in the vicinity of the project site. The St. James LRT station is located on First Street just south of St. James Street. Light rail provides service with approximately 10-minute headways during commute hours.

(2) CalTrain. Commuter rail service between San Francisco and Gilroy is provided by CalTrain. There is one CalTrain station located within the project study area—the San Jose Diridon CalTrain station—located at the intersection of San Fernando Street and Cahill Street across from the San Jose Arena. The San Jose Diridon CalTrain station Park & Ride lot is accessible from Cahill

Table V.B-3: Existing Transit Service Bus Lines

Bus Lines	Route Description	Commute Hour Headways
22	Eastridge to Palo Alto/Menlo Park Caltrain Station	10
23	Downtown San Jose to San Antonio Shopping Center	15-30
64	Almaden LRT Station to Alum Rock and Miguelito	15
66	Santa Teresa Hospital to Milpitas	15
68	San Jose Diridon Station to Gilroy/Gavilan College	15
72	Downtown San Jose to Santa Teresa LRT Station	15-30
73	Downtown San Jose to Snell and Capitol Expressway	20
82	Westgate to Hedding and 17th Street	30
85	Lawrence Expressway and Moorpark to 10th and Hedding	30
180*	San Jose Diridon Station to Fremont BART Station	15-20
300	East San Jose to Palo Alto Caltrain Station	20-30
304	South San Jose to Mountain View	15-30
305	South San Jose to Mountain View	60

* Express bus route.

Source: Hexagon Transportation Consultants, 2003.

Street. At the San Jose Diridon CalTrain station, CalTrain provides service with approximately 15- to 30-minute headways during commute hours.

The existing transit services are shown graphically on Figure V.B-2.

d. Existing Intersection Lane Configurations. The existing lane configurations at the study intersections were provided by city staff and confirmed by observations in the field. The existing intersection lane configurations are shown in Appendix B.1.

e. Existing Traffic Volumes. Existing peak-hour traffic volumes were obtained from the City of San Jose and supplemented with manual turning-movement counts.

Due to the upgrade of the arterial section of SR 87 to a freeway, the study intersections along and near this segment are currently experiencing unusual travel patterns. Thus, older counts were used for these intersections, and a 1.2 percent per year growth factor was applied. Those intersections include:

Coleman Avenue and Hedding Street
Coleman Avenue and Taylor Street

The existing peak-hour intersection volumes as well as count data are included in Appendix B.1.

f. Existing Intersection Levels of Service.

(1) City of San Jose Intersection Analysis. The results of the level of service analysis under existing conditions are summarized in Table V.B-4. The results show that two of the study intersections currently operate at an unacceptable LOS F during at least one of the peak hours.

LSA

FIGURE V.B-2

LEGEND

DOWNTOWN CORE BOUNDARY

LRT

BUS ROUTE

CALTRAIN

PROJECT SITE LOCATION

NOT TO SCALE

Brandenburg Mixed Use Project/
North San Pedro Housing Sites
Existing Transit Service

SOURCE: HEXAGON TRANSPORTATION CONSULTANTS, INC., 2003

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Coleman Avenue and Hedding Street
Coleman Avenue and Taylor Street

The level of service calculation sheets are included in Appendix B.1.

(2) CMP Intersection Analysis. The level of service results for the CMP intersections under existing conditions are summarized in Table V.B-4. The results show that all of the CMP study intersections currently operate at an acceptable LOS D or better.

g. Existing Freeway Levels of Service. Traffic volumes for the subject freeway segments were obtained from the CMP Annual Monitoring Report. Due to the construction on SR 87 north of Julian Street, the 2001 CMP freeway counts included segments on SR 87 up to Coleman Avenue only. Thus, SR 87 was analyzed from SR 85 to Coleman Avenue. The results of the analysis are summarized in Table V.B-5. The results show that seventeen of the directional freeway segments analyzed currently operate at an unacceptable LOS F during at least one of the peak hours.

h. Observed Existing Traffic Conditions. Traffic conditions in the field were observed in order to identify existing operational deficiencies and to confirm the accuracy of calculated levels of service. The purpose of this effort was: (1) to identify any existing traffic problems that may not be directly related to intersection level of service; (2) to identify any locations where the level of service calculation does not accurately reflect level of service in the field; (3) to identify possible causes of congestion if observed; and (4) to observe the effects of ramp metering on the local traffic.

Route 87 currently is under construction north of Julian Street to upgrade to a freeway. Because of the congestion on SR 87 caused by construction activities, traffic is observed to follow a bypass route via the Julian Street interchange to Market Street, First Street, or Third Street. This bypass traffic is reflected in the traffic counts.

At the SR 87 and Julian Street interchange, freeway ramp metering and the traffic congestion on SR 87 occasionally backs up on the Julian Street on-ramps and affects the operations of the ramp terminal intersections. The on-going construction and reduced speed limits on SR 87 north of Julian Street might be contributing to the congestion. In addition, the southbound loop on-ramp currently carries a volume over 1,000 vehicles during the PM peak hour. The ramp is just beyond the Julian/SR 87 signal and, to access the ramp, all on-ramp traffic has to use the right lane on Julian Street, which creates a lane imbalance at the signal. This causes traffic back-ups on Julian that sometimes extend to Market Street, although traffic clears with every cycle.

Northbound queues on Market Street occasionally extend through successive intersections, sometimes without dissipating during the cycle. During the PM peak hour the same problem can be observed for the southbound direction.

On Santa Clara Street, at the SR 87 off-ramp, long vehicle queues form during the AM peak hour. Eastbound traffic on Santa Clara Street was observed to back up from Almaden Avenue, past Almaden Boulevard, to the SR 87 off-ramp. Long vehicle queues extend along the SR 87 off-ramp, due to backup queues on eastbound Santa Clara Street from Almaden Boulevard. The vehicle queue on the off-ramp does not dissipate by the end of each cycle.

Table V.B-4: Existing Intersection Levels of Service

Intersection	Peak Hour	Count Date	Average Delay	LOS
I-880 and Coleman Avenue (N)*	AM	9/17/02	14.2	B
	PM	9/17/02	8.3	B
I-880 and Coleman Avenue (S)*	AM	9/17/02	9.1	B
	PM	9/17/02	9.4	B
The Alameda and Hedding Street*	AM	9/25/02	34.1	D
	PM	9/25/02	24.4	C
Coleman Avenue and Hedding Street	AM	3/19/97	44.4	E
	PM	10/29/96	35.6	D
The Alameda and Naglee Ave./Taylor St.*	AM	9/25/02	32.5	D
	PM	9/25/02	27.2	D
Coleman Avenue and Taylor Street	AM	1/29/97	47.2	E
	PM	1/29/97	34.1	D
Market Street and Julian Street	AM	11/05/02	15.1	C
	PM	10/31/02	18.4	C
First Street and Julian Street	AM	11/06/02	20.7	C
	PM	11/06/02	22.0	C
Second Street and Julian Street	AM	11/06/02	15.0	C
	PM	11/06/02	19.2	C
Third Street and Julian Street	AM	10/30/02	9.5	B
	PM	10/30/02	8.8	B
Fourth Street and Julian Street	AM	11/05/02	7.5	B
	PM	11/05/02	8.9	B
Tenth Street and Julian Street	AM	10/31/02	8.3	B
	PM	10/31/02	7.8	B
Eleven Street and Julian Street	AM	10/31/02	9.6	B
	PM	10/31/02	8.5	B
SR 87 and Julian Street (W)*	AM	10/03/02	11.0	B
	PM	10/03/02	11.4	B
SR 87 and Julian Street (E)*	AM	10/03/02	32.2	D
	PM	10/03/02	33.4	D
San Pedro Street and St. James Street	AM	5/02/02	3.3	A
	PM	5/02/02	7.2	B
Market Street and St. James Street	AM	11/05/02	16.2	C
	PM	11/05/02	14.9	B
Tenth Street and Santa Clara Street	AM	10/31/02	12.0	B
	PM	10/31/02	17.0	C
Eleven Street and Santa Clara Street	AM	10/31/02	13.2	B
	PM	10/31/02	11.8	B
Almaden Boulevard and San Carlos Street*	AM	9/17/02	22.0	C
	PM	9/17/02	26.9	D
Market Street and San Carlos Street*	AM	9/17/02	24.3	C
	PM	9/17/02	29.8	D
North First Street and I-880 (N)*	AM	9/17/02	16.2	C
	PM	9/17/02	11.9	B
North First Street and I-880 (S)*	AM	9/17/02	17.4	C
	PM	10/31/02	12.9	B

*Denotes CMP intersection.

Source: Hexagon Transportation Consultants, 2003.

Table V.B-5: Freeway Segment Levels of Service – Existing Conditions

				Mixed-Flow Lanes					HOV Lane Traffic Volume				
Freeway	Segment	Direction	Peak Hour	Avg. Speed[a]	# of Lanes	Volume[a]	Density	LOS	Avg. Speed[a]	# of Lanes	Volume[a]	Density	LOS
SR 87	Coleman to Julian	SB	AM	67	2	2,810	21.0	C	N/A	N/A	N/A		
			PM	57	2	4,450	39.0	D	N/A	N/A	N/A		
SR 87	Julian to I-280	SB	AM	67	2	2,140	16.0	B	N/A	N/A	N/A		
			PM	17	2	3,060	90.0	F	N/A	N/A	N/A		
SR 87	I-280 to Alma	SB	AM	67	2	2,410	18.0	C	N/A	N/A	N/A		
			PM	19	2	3,230	85.0	F	N/A	N/A	N/A		
SR 87	Alma to Almaden Expressway	SB	AM	43	2	4,210	49.0	E	N/A	N/A	N/A		
			PM	24	2	3,600	75.0	F	N/A	N/A	N/A		
SR 87	Almaden Expressway to Curtner	SB	AM	61	2	4,390	36.0	D	N/A	N/A	N/A		
			PM	61	2	4,390	36.0	D	N/A	N/A	N/A		
SR 87	Curtner to Capitol Expressway	SB	AM	67	2	2,550	19.0	C	N/A	N/A	N/A		
			PM	59	2	4,370	37.0	D	N/A	N/A	N/A		
SR 87	Capitol Expressway to SR 85	SB	AM	67	2	2,810	21.0	C	N/A	N/A	N/A		
			PM	64	2	4,100	32.0	D	N/A	N/A	N/A		
I-280	US 101 to McLaughlin	WB	AM	14	4	5,660	101.1	F	N/A	N/A	N/A		
			PM	59	4	8,730	37.0	D	N/A	N/A	N/A		
I-280	McLaughlin to Tenth	WB	AM	23	4	6,990	76.0	F	N/A	N/A	N/A		
			PM	29	4	7,660	66.0	F	N/A	N/A	N/A		
I-280	Tenth to SR 87	WB	AM	36	4	8,060	56.0	F	N/A	N/A	N/A		
			PM	24	4	7,100	74.0	F	N/A	N/A	N/A		
I-280	SR 87 to Bird	WB	AM	21	4	6,800	81.0	F	N/A	N/A	N/A		
			PM	15	4	5,880	98.0	F	N/A	N/A	N/A		
I-280	Bird to Meridian	WB	AM	25	4	7,300	73.0	F	N/A	N/A	N/A		
			PM	45	4	8,640	48.0	E	N/A	N/A	N/A		
I-280	Meridian to I-880	WB	AM	18	4	5,930	89.0	F	66	1	1,720	26.1	D
			PM	54	4	8,190	41.0	D	67	1	940	14.0	B
I-880	US 101 to North First	SB	AM	64	3	6,340	33.0	D	N/A	N/A	N/A		
			PM	35	3	6,090	58.0	F	N/A	N/A	N/A		
I-880	North First to SR 87	SB	AM	63	3	6,430	34.0	D	N/A	N/A	N/A		
			PM	28	3	5,630	67.0	F	N/A	N/A	N/A		

Table V.B-5 *continued*

Freeway	Segment	Direction	Peak Hour	Mixed-Flow Lanes					HOV Lane Traffic Volume				
				Avg. Speed[a]	# of Lanes	Volume[a]	Density	LOS	Avg. Speed[a]	# of Lanes	Volume[a]	Density	LOS
I-880	SR 87 to Coleman	SB	AM	59	3	6,550	37.0	D	N/A	N/A	N/A		
			PM	36	3	6,160	57.0	F	N/A	N/A	N/A		
I-880	Coleman to The Alameda	SB	AM	63	3	6,430	34.0	D	N/A	N/A	N/A		
			PM	31	3	5,860	63.0	F	N/A	N/A	N/A		
I-880	The Alameda to Bascom	SB	AM	66	3	5,540	28.0	D	N/A	N/A	N/A		
			PM	25	3	5,400	72.0	F	N/A	N/A	N/A		
I-880	Bascom to The Alameda	NB	AM	16	3	4,420	92.1	F	N/A	N/A	N/A		
			PM	66	3	4,750	24.0	C	N/A	N/A	N/A		
I-880	The Alameda to Coleman	NB	AM	19	3	4,790	84.0	F	N/A	N/A	N/A		
			PM	66	3	4,750	24.0	C	N/A	N/A	N/A		
I-880	Coleman to SR 87	NB	AM	15	3	4,370	97.1	F	N/A	N/A	N/A		
			PM	55	3	6,600	40.0	D	N/A	N/A	N/A		
I-880	SR 87 to North First	NB	AM	17	3	4,590	90.0	F	N/A	N/A	N/A		
			PM	51	3	6,580	43.0	D	N/A	N/A	N/A		
I-880	North First to US 101	NB	AM	12	3	3,890	108.1	F	N/A	N/A	N/A		
			PM	55	3	6,600	40.0	D	N/A	N/A	N/A		
I-280	I-880 to Meridian	EB	AM	66	4	6,350	26.0	D	67	1	1,010	15.1	B
			PM	27	4	6,890	69.0	F	59	1	2,180	36.9	D
I-280	Meridian to Bird	EB	AM	61	4	8,780	36.0	D	N/A	N/A	N/A		
			PM	25	4	7,300	73.0	F	N/A	N/A	N/A		
I-280	Bird to SR 87	EB	AM	67	4	6,160	23.0	C	N/A	N/A	N/A		
			PM	23	4	7,080	77.0	F	N/A	N/A	N/A		
I-280	SR 87 to Tenth	EB	AM	66	4	6,340	24.0	D	N/A	N/A	N/A		
			PM	26	4	7,280	70.0	F	N/A	N/A	N/A		
I-280	Tenth to McLaughlin	EB	AM	65	4	8,060	31.0	D	N/A	N/A	N/A		
			PM	50	4	8,800	44.0	D	N/A	N/A	N/A		
I-280	McLaughlin to US 101	EB	AM	67	4	6,160	23.0	C	N/A	N/A	N/A		
			PM	65	4	7,800	30.0	D	N/A	N/A	N/A		
SR 87	SR 85 to Capitol Expressway	NB	AM	62	2	4,340	35.0	D	N/A	N/A	N/A		
			PM	66	2	3,430	26.0	D	N/A	N/A	N/A		
SR 87	Capitol Expressway to Curtner	NB	AM	17	2	3,090	90.9	F	N/A	N/A	N/A		
			PM	65	2	3,770	29.0	D	N/A	N/A	N/A		

Table V.B-5 *continued*

Freeway	Segment	Direction	Peak Hour	Mixed-Flow Lanes					HOV Lane Traffic Volume				
				Avg. Speed[a]	# of Lanes	Volume[a]	Density	LOS	Avg. Speed[a]	# of Lanes	Volume[a]	Density	LOS
SR 87	Curtner to Almaden Expressway	NB	AM	18	2	3,200	88.9	F	N/A	N/A	N/A		
			PM	64	2	4,100	32.0	D	N/A	N/A	N/A		
SR 87	Almaden Expressway to Alma	NB	AM	20	2	3,320	83.0	F	N/A	N/A	N/A		
			PM	39	2	4,130	52.9	E	N/A	N/A	N/A		
SR 87	Alma to I-280	NB	AM	65	2	3,770	29.0	D	N/A	N/A	N/A		
			PM	67	2	2,810	21.0	C	N/A	N/A	N/A		
SR 87	I-280 to Julian	NB	AM	67	2	2,810	21.0	C	N/A	N/A	N/A		
			PM	67	2	1,470	11.0	B	N/A	N/A	N/A		
SR 87	Julian to Coleman	NB	AM	9	2	2,160	120.0	F	N/A	N/A	N/A		
			PM	67	2	2,010	15.0	B	N/A	N/A	N/A		

[a] Source: Santa Clara Valley Transportation Authority Congestion Management Program Monitoring Study, 2001.

3. Background Conditions

Background conditions are defined as the conditions that will exist just prior to completion of the proposed development. Estimated traffic volumes for background conditions comprise volumes from existing traffic counts plus traffic generated by other approved developments in the vicinity of the site. This section describes the procedure used to determine background traffic volumes and presents the resulting traffic conditions.

a. Background Transportation Network. It is assumed in this analysis that the transportation network under background conditions would be the same as under existing conditions, with the exception of the project area where two different street layouts are being proposed. These are explained in more detail in the following section.

b. Background Traffic Volumes. Background peak-hour traffic volumes were calculated by adding to existing volumes the estimated traffic from approved but not yet constructed developments. The added traffic from approved but not yet constructed developments were provided by the city in the form of the Approved Trips Inventory (ATI). The ATI data are included in Appendix B.1.

c. Background Intersection Levels of Service.

(1) City of San Jose Intersection Analysis. The results of the intersection level of service analysis under background conditions are summarized in Table V.B-6. The results show that two of the study intersections would operate at an unacceptable LOS F during at least one of the peak hours under background conditions:

Coleman Avenue and Hedding Street
Coleman Avenue and Taylor Street

The level of service calculation sheets are presented in Appendix B.1.

(2) CMP Intersection Analysis. The level of service results for the CMP intersections under background conditions are also summarized in Table V.B-6. The results show that all of the CMP study intersections would operate at an acceptable LOS D or better.

d. Background Freeway Segment Levels of Service. An analysis of freeway segment level of service is not required for background conditions, per the City of San Jose and CMP requirements.

4. Project Impacts and Mitigation Measures

This section describes significant project impacts, and measures that are recommended to mitigate project impacts. Included are descriptions of the significance criteria that define an impact, estimates of project-generated traffic, identification of the impacts, and descriptions of the mitigation measures. Project conditions are represented by background traffic conditions with the addition of traffic generated by the project.

The project was analyzed with the proposed street layouts which consist of modifying the existing roadway network within the project area. The purpose is to design a roadway network that will provide better access and safety to and around the project site. The roadways that mainly would be affected by such modifications are Julian Street, Terraine Street, and Devine Street within the project

Table V.B-6: Background Intersection Levels of Service

Intersection	Peak Hour	Count Date	Existing		Background	
			Avg. Delay	LOS	Avg. Delay	LOS
I-880 and Coleman Avenue (N)*	AM	9/17/02	14.2	B	21.2	C
	PM	9/17/02	8.3	B	12.4	B
I-880 and Coleman Avenue (S)*	AM	9/17/02	9.1	B	11.3	B
	PM	9/17/02	9.4	B	11.9	B
The Alameda and Hedding Street*	AM	9/25/02	34.1	D	34.2	D
	PM	9/25/02	24.4	C	24.5	C
Coleman Avenue and Hedding Street	AM	3/19/97	44.4	E	92.8	F
	PM	10/29/96	35.6	D	58.6	E
The Alameda and Naglee Ave./Taylor St.*	AM	9/25/02	32.5	D	32.9	D
	PM	9/25/02	27.2	D	27.2	D
Coleman Avenue and Taylor Street	AM	1/29/97	47.2	E	71.4	F
	PM	1/29/97	34.1	D	36.2	D
Market Street and Julian Street	AM	11/05/02	15.1	C	14.9	B
	PM	10/31/02	18.4	C	17.1	C
First Street and Julian Street	AM	11/06/02	20.7	C	15.4	C
	PM	11/06/02	22.0	C	15.9	C
Second Street and Julian Street	AM	11/06/02	15.0	C	16.1	C
	PM	11/06/02	19.2	C	20.1	C
Third Street and Julian Street	AM	10/30/02	9.5	B	9.7	B
	PM	10/30/02	8.8	B	8.9	B
Fourth Street and Julian Street	AM	11/05/02	7.5	B	7.7	B
	PM	11/05/02	8.9	B	8.9	B
Tenth Street and Julian Street	AM	10/31/02	8.3	B	8.5	B
	PM	10/31/02	7.8	B	7.9	B
Eleven Street and Julian Street	AM	10/31/02	9.6	B	9.8	B
	PM	10/31/02	8.5	B	8.5	B
SR 87 and Julian Street (W)*	AM	10/03/02	11.0	B	11.6	B
	PM	10/03/02	11.4	B	11.6	B
SR 87 and Julian Street (E)*	AM	10/03/02	32.2	D	37.0	D
	PM	10/03/02	33.4	D	35.5	D
San Pedro Street and St. James Street	AM	5/02/02	3.3	A	3.3	A
	PM	5/02/02	7.2	B	6.6	B
Market Street and St. James Street	AM	11/05/02	16.2	C	16.7	C
	PM	11/05/02	14.9	B	16.1	C
Tenth Street and Santa Clara Street	AM	10/31/02	12.0	B	11.6	B
	PM	10/31/02	17.0	C	18.4	C
Eleven Street and Santa Clara Street	AM	10/31/02	13.2	B	13.8	B
	PM	10/31/02	11.8	B	12.0	B
Almaden Boulevard and San Carlos Street*	AM	9/17/02	22.0	C	25.4	D
	PM	9/17/02	26.9	D	31.0	D
Market Street and San Carlos Street*	AM	9/17/02	24.3	C	27.4	D
	PM	9/17/02	29.8	D	33.9	D

Table IV.B-8 *continued*

Intersection	Peak Hour	Count Date	Existing		Background	
			Avg. Delay	LOS	Avg. Delay	LOS
North First Street and I-880 (N)*	AM	9/17/02	16.2	C	31.0	D
	PM	9/17/02	11.9	B	13.9	B
North First Street and I-880 (S)*	AM	9/17/02	17.4	C	19.4	C
	PM	10/31/02	12.9	B	13.5	B
Terraine Street and Julian Street (Future)	AM		0.0		0.4	A
	PM		0.0		0.5	A
Terraine Street and Devine Street (Future)	AM		0.0		8.2	B
	PM		0.0		15.5	C
San Pedro Street and Julian Street (Future)	AM		0.0	0	2.8	A
	PM		0.0	0	2.6	A

* Denotes CMP intersection.

Source: Hexagon Transportation Consultants, 2003.

area. With the exception of the modifications to the roadway network within the project area, the transportation network under project conditions would be the same as under existing conditions.

The project proposes to remove the curved portion of the existing Julian Street, from its intersection with Market Street to its intersection with the SR 87 northbound ramps, and replace it with a straight extension that would connect to the west with Terraine Street. Terraine Street would be extended as a one-way street to St. James Street, and Devine Street to Terraine Street, forming a grid system roadway network (see Figure V.B-3). The proposed project would create a new intersection at Terraine Street and Julian Street. South of this intersection, Terraine Street would become a one-way southbound street. Julian and Terrain Streets would then become a one-way arterial moving traffic in the westbound direction. The proposed project would also involve the installation of at least three new traffic signals at the new intersections on Julian and Terraine Streets.

a. Significant Impact Criteria. For the purposes of this project, a transportation impact is considered significant if the project would:

- Cause a local (outside the Downtown Core Area) intersection to deteriorate below LOS D, or if the intersection is already operating at LOS E or F, cause an increase in the average stopped delay for the critical movements by four seconds or more and the critical V/C value to increase by 0.01 or more;
- Cause a regional (CMP) intersection to deteriorate from an LOS E or better to LOS F or cause critical movement delay at such an intersection already operating at LOS F to increase by four seconds or more and the critical V/C value to increase by 0.01 or more;
- Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections);
- Result in inadequate emergency access or create an operational safety hazard;

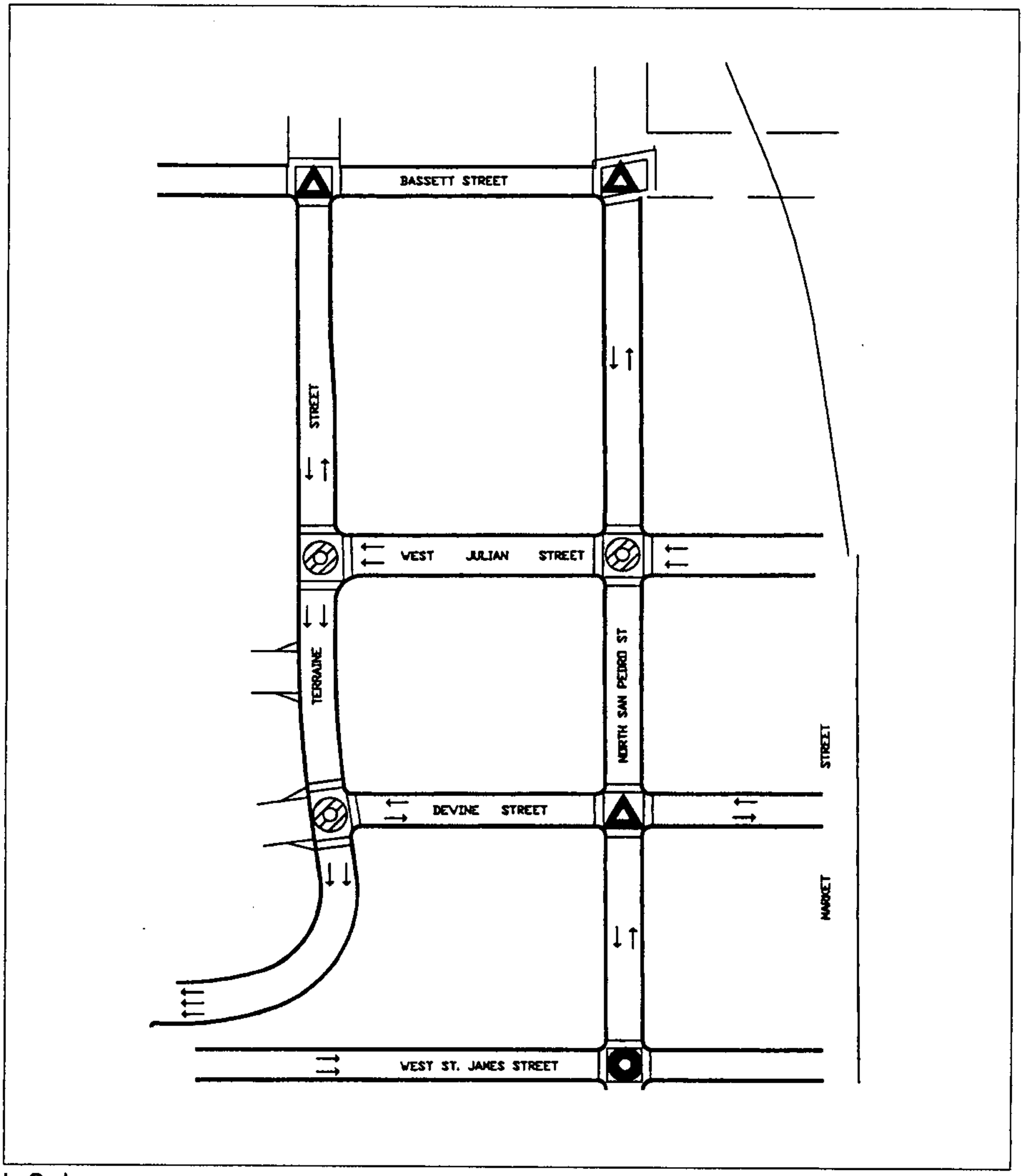

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FIGURE V.B-3

LEGEND

EXISTING SIGNALIZED INTERSECTION

PROPOSED FUTURE SIGNALIZED INTERSECTION

UNSIGNALIZED INTERSECTION

NOT TO SCALE

Brandenburg Mixed Use Project/
North San Pedro Housing Sites
Roadway Network

SOURCE: HEXAGON TRANSPORTATION CONSULTANTS, INC., 2003

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- Create unsafe conditions for pedestrians or bicyclists or impede the development of planned pedestrian or bicycle facilities;
- Cause a local Downtown Core intersection to operate under conditions which exceed its capacity (degrade an intersection from LOS E or better to F under project conditions, or cause substantial stacking which affects a regional facility);
- For an intersection outside the Downtown Core Area already operating at an unacceptable level (LOS E or F), cause both the critical-movement delay at the intersection to increase by four or more seconds and the demand-to-capacity ratio (V/C) to increase by .01 or greater or should the change in critical movement delay be negative, an increase in V/C of .01 percent;
- Contribute traffic that is more than one percent of capacity to a freeway segment operating at LOS F;
- Conflict with adopted policies, plans or programs supporting alternative transportation (e.g. bus turnouts, bicycle racks, pedestrian paths or trails);
- Traffic volumes exceed lane capacity; or
- Create an operational safety hazard.

b. Project Trip Estimates. The magnitude of traffic produced by a new development and the locations where that traffic would appear are estimated using a three-step process: (1) trip generation; (2) trip distribution; and (3) trip assignment. In determining project trip generation, the magnitude of traffic entering and exiting the site is estimated for the AM and PM peak hours. As part of the project trip distribution, an estimate is made of the directions to and from which the project trips would travel. In the project trip assignment, the project trips are assigned to specific streets and intersections. These procedures are described further in the following sections.

(1) Trip Generation. Through empirical research, data have been collected that correlate to common land uses and their propensity for producing traffic. Thus far, the most common land uses there are standard trip generation rates that can be applied to help predict the future traffic increases that would result from a new development of that land use type.

The magnitude of traffic added to the roadway system by the proposed project was estimated by applying the appropriate trip generation rates to each individual land use. The trip rates were taken from two sources: (1) *Interim Guidelines for Traffic Impact Analysis of Land Developments*, June 1994, by City of San Jose Department of Public Works; and (2) the results of a Downtown trip generation survey done by Parsons Transportation Group, Inc. The latter source was used for the office trip generation. City of San Jose trip generation rates were used for the proposed residential and retail land uses. A 25 percent and a 50 percent transit/walk reduction were applied to the residential and the retail trip generation, respectively, due to their Downtown location and their proximity to transit/LRT stations. These reductions are consistent with previous traffic studies performed for the Downtown area. The trips estimated for existing uses were subtracted. After taking all the reductions and adding together all the estimated project trips for the different land uses, it was estimated that the project would generate a total of 640 and 725 net project trips during the AM and the PM peak hours, respectively. Using the specified inbound/outbound splits recommended by the City of San Jose, the project would produce 197 inbound trips and 442 outbound trips during the AM peak hour and 486 inbound

and 240 outbound trips during the PM peak hour. The project trip generation estimates are presented in Table V.B-7.

The project trip reductions used for the residential and retail land uses were derived based on previous analyses in the downtown area. It is safe to assume that approximately 25 percent of the Downtown residents either work within the Downtown or take some type of public transportation to work, since it is convenient and very accessible. In addition, it was estimated that at least half of the patronage to the retail facilities would come from within the area or would be pass-by traffic. Pass-by trips are trips that would already be on the adjacent roadways (and therefore would already be counted in the background traffic volumes) but would turn into the site while passing by. No more than half of the retail traffic would come from outside the Downtown since these same services are found throughout the City.

(2) Trip Distribution. Since the project includes different land uses, two different project trip distribution patterns were used: residential and non-residential trip distributions. These distinctions were made with the intent of grouping together the project land uses that exhibit similar commute-period trip-making characteristics. Both of the trip distributions used in the analysis were provided by City staff. These trip distribution patterns are based on zip code studies performed by the Valley Transportation Authority, VTA. The trip distribution patterns are shown graphically on Figure V.B-4.

(3) Trip Assignment. The peak-hour trips generated by the proposed development were assigned to the roadway system in accordance with the trip distribution patterns discussed above. Project trip assignment to the study intersections is shown in Appendix B.1. In addition, the gross project trips (trips estimated to be generated by the proposed project before the existing use was deducted) are shown on Figure V.B-5.

c. Project Traffic Volumes. Project trips, as represented in the above project trip assignment, were added to future background traffic volumes to obtain background plus project traffic volumes. Background traffic volumes plus project trips are typically referred to simply as *project traffic volumes*; this is contrasted with the term *project trips,* which is used to signify the traffic that is produced specifically by the project. Project traffic volumes as well as traffic volumes for all components of traffic are shown graphically and tabulated in Appendix B.1.

d. Project Intersection Analysis.

(1) City of San Jose Level of Service Analysis. The results of the level of service analysis under project conditions are summarized in Table V.B-8. The results show that two of the study intersections would operate at an unacceptable LOS F under project conditions. All of these intersections would exceed the significance thresholds used by the City of San Jose to define impacts.

Coleman Avenue and Hedding Street (AM&PM)
Coleman Avenue and Taylor Street (AM)

All other intersections would operate at LOS D or better. The level of service calculation sheets are included in Appendix B.1.

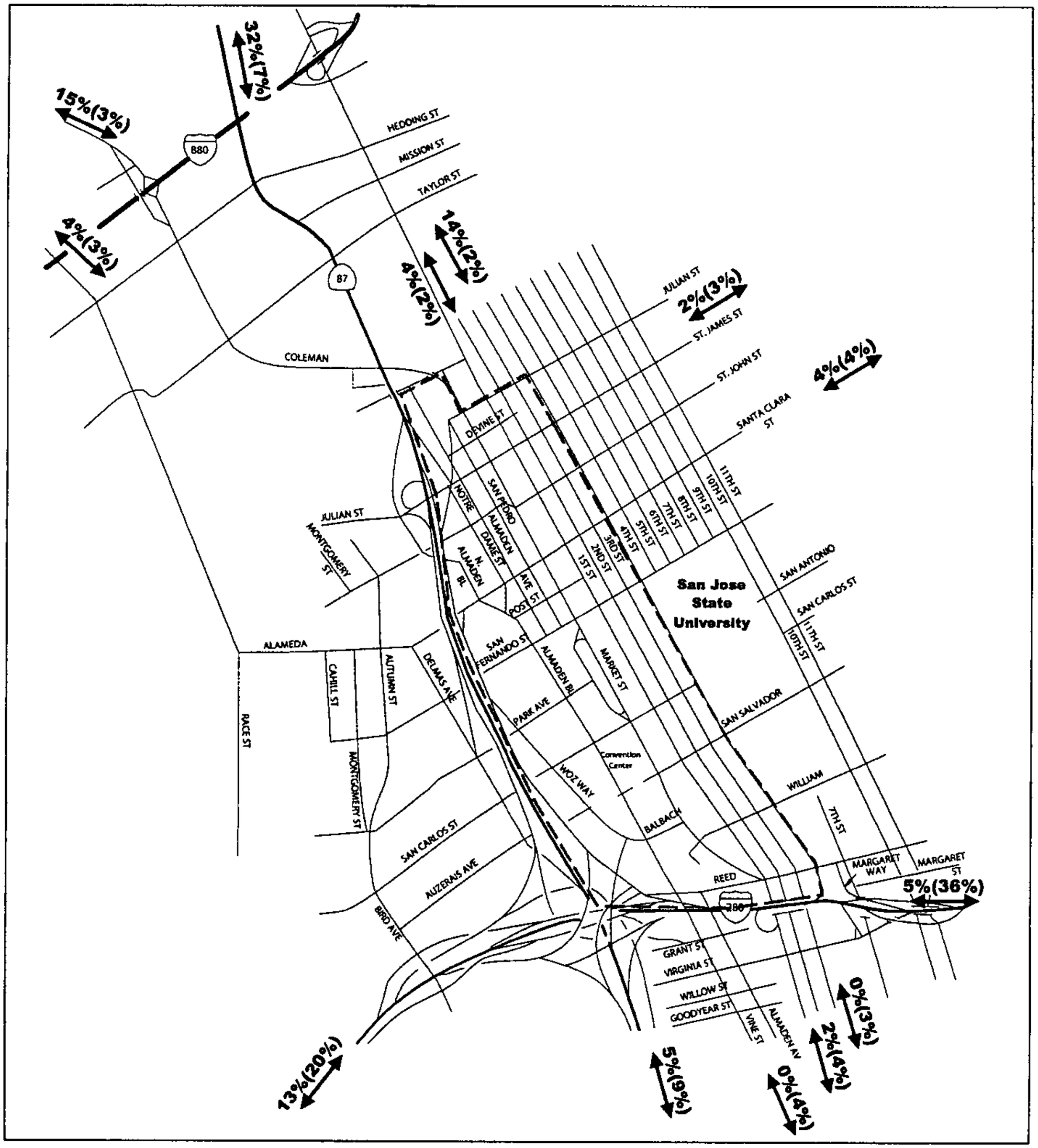

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FIGURE V.B-4

NOT TO SCALE

LEGEND

DOWNTOWN CORE BOUNDARY

XX(XX) RESIDENTIAL (NON-RESIDENTIAL)

Brandenburg Mixed Use Project/
North San Pedro Housing Sites
Project Trip Distribution

SOURCE: HEXAGON TRANSPORTATION CONSULTANTS, INC., 2003

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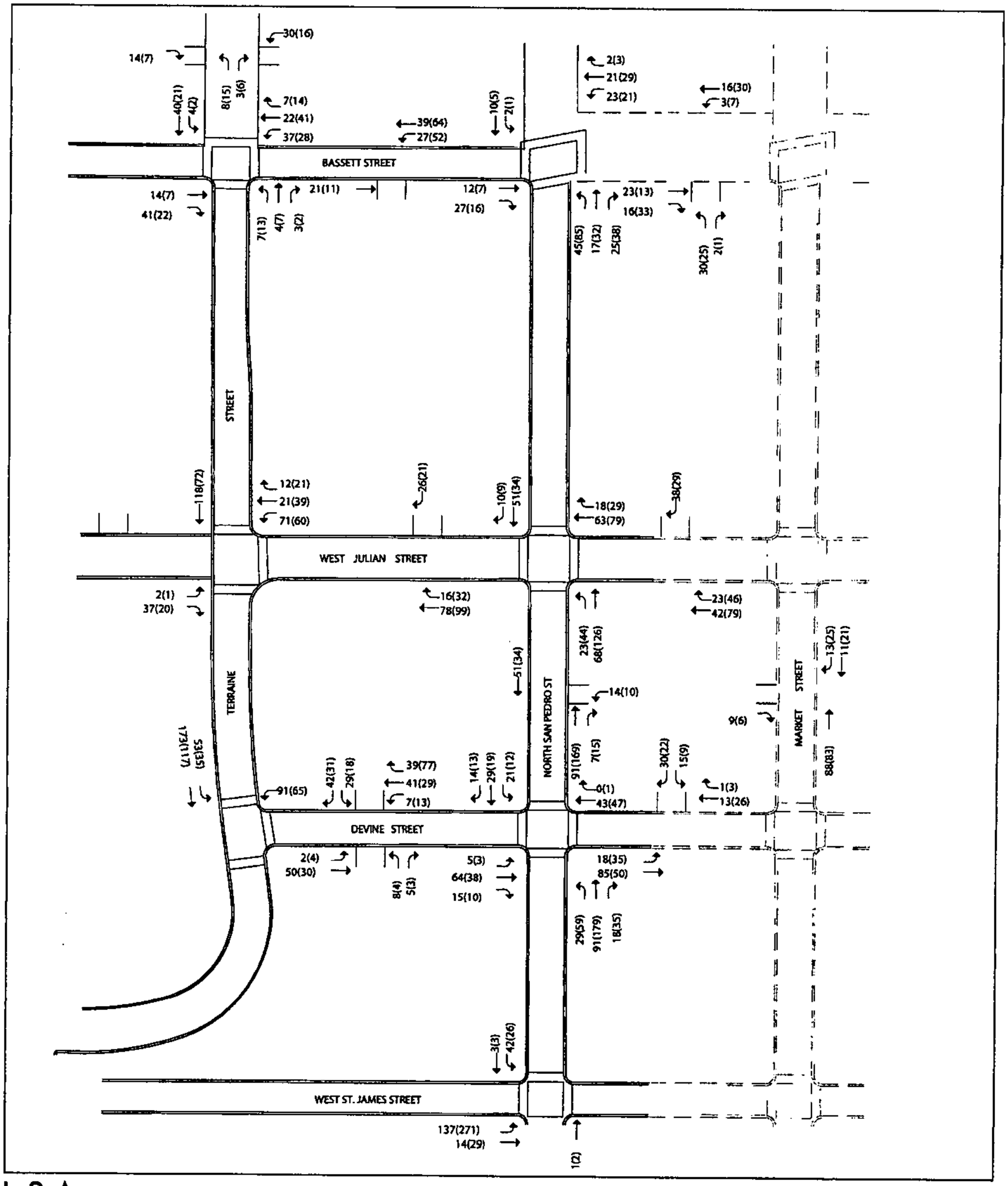

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FIGURE V.B-5

NOT TO SCALE

Brandenburg Mixed Use Project/
North San Pedro Housing Sites
Project Trip Generation

SOURCE: HEXAGON TRANSPORTATION CONSULTANTS, INC., 2003

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Table V.B-7: Project Trip Generation Estimates

Land Use	Size	Daily Rate[a]	Daily Trips		AM Peak Hour				PM Peak Hour			
					Peak Hour Rate[a]	In	Out	Total	Peak Hour Rate[a]	In	Out	Total
Existing Uses												
Office[b]	60.00 ksf				1.02	58	4	62	0.99	7	52	59
Transit Reduction[d]				0.03		-2	0	-2		0	-2	-2
						56	4	59		7	51	58
Proposed Uses												
Residential (Apartments)[c]	1,500 units	6.0	9,000		0.10	315	585	900	0.10	585	315	900
Transit/Walk Reduction[d]				0.25		-79	-146	-225		-146	-79	-225
						236	439	675		439	236	675
Strip Commercial[c]	60.00 ksf	40.0	2,400		0.02	34	14	48	0.09	108	108	216
Transit/Walk Reduction[d]				0.50		-17	-7	-24		-54	-54	-108
						17	7	24		54	54	108
					Net Total	**197**	**450**	**640**		**486**	**240**	**725**

[a] Per 1,000 square feet/per unit.
[b] Office trip generation rates used were the result of the Downtown Parking Study, by Parsons Transportation Group, Inc.
[c] City of San Jose trip generation rates were used.
[d] A transit/walk reduction was taken due to the downtown location of the project.

Source: City of San Jose Interim Guidelines for Traffic Impact Analysis for Land Developments, "Common Vehicular Trip Generation rates for the San Jose Area," March 1994.

Impact TRANS-1: The intersections of Coleman Avenue and Hedding Street and Coleman Avenue and Taylor Street would continue to experience unacceptable levels of service. (S)

As described for both the existing condition and the background condition, these intersections operate today and will operate in the future (without the proposed project) at LOS F during at least one of the peak hours.

> Mitigation Measure TRANS-1: Mitigation for the impacts at the intersections of Coleman/Hedding and Coleman/Taylor would be to widen Coleman Avenue to six lanes, south of I-880. However, an improvement of this magnitude is beyond the financial capability of this development. Therefore, these intersection impacts should be considered significant and unavoidable. (SU)

It should be noted that an EIR is underway for *Strategy 2000: San Jose Greater Downtown Strategy for Development*. Transportation improvements deriving from that effort may include widening Coleman Avenue.

(2) CMP Level of Service Analysis. The level of service results for the CMP intersections under project conditions are summarized in Table V.B-8. The results show that all of the CMP study intersections would operate at an acceptable LOS D or better under project conditions. Therefore, none of these intersections would exceed the significance thresholds used by the City of San Jose to define impacts.

Table V.B-8: Project Intersection Levels of Service

Intersection	Peak Hour	Background		Project			
		Avg. Delay	LOS	Avg. Delay	LOS	Included in Critical Delay	Included. In Critical V/C
I-880 and Coleman Avenue (N)*	AM	21.2	C	21.7	C	0.7	0.011
	PM	12.4	B	12.9	B	0.7	0.012
I-880 and Coleman Avenue (S)*	AM	11.3	B	11.4	B	0.2	0.020
	PM	11.9	B	12.1	B	0.2	0.012
The Alameda and Hedding Street*	AM	34.2	D	34.2	D	0.1	0.005
	PM	24.5	C	24.4	C	0.0	0.005
Coleman Avenue and Hedding Street	AM	**92.8**	**F**	**99.8**	**F**	**11.4**	**0.019**
	PM	**58.6**	**E**	**63.6**	**F**	**8.6**	**0.019**
The Alameda and Naglee Ave./Taylor St.*	AM	32.9	D	32.8	D	-0.1	0.005
	PM	27.2	D	27.2	D	-0.1	0.005
Coleman Avenue and Taylor Street	AM	**71.4**	**F**	**76.2**	**F**	**8.0**	**0.019**
	PM	36.2	D	36.4	D	0.3	0.010
Market Street and Julian Street	AM	14.9	B	15.2	C	0.2	0.024
	PM	17.1	C	17.8	C	1.6	0.066
First Street and Julian Street	AM	15.4	C	15.7	C	0.4	0.027
	PM	15.9	C	16.3	C	0.4	0.039
Second Street and Julian Street	AM	16.1	C	16.7	C	0.6	0.019
	PM	20.1	C	20.9	C	0.8	0.041
Third Street and Julian Street	AM	9.7	B	9.8	B	0.1	0.014
	PM	8.9	B	9.0	B	0.1	0.021
Fourth Street and Julian Street	AM	7.7	B	7.8	B	0.1	0.008
	PM	8.9	B	9.2	B	0.2	0.016
Tenth Street and Julian Street	AM	8.5	B	8.5	B	0.0	0.002
	PM	7.9	B	8.0	B	0.1	0.004
Eleven Street and Julian Street	AM	9.8	B	9.9	B	0.0	0.007
	PM	8.5	B	8.6	B	0.0	0.007
SR 87 and Julian Street (W)*	AM	11.6	B	12.3	B	1.0	0.028
	PM	11.6	B	13.3	B	2.1	0.049
SR 87 and Julian Street (E)*	AM	37.0	D	37.9	D	1.5	0.055
	PM	35.5	D	36.6	D	1.6	0.058
San Pedro Street and St. James Street	AM	3.3	A	4.0	A	0.6	0.045
	PM	6.6	B	6.0	B	-0.9	0.059
Market Street and St. James Street	AM	16.7	C	17.1	C	0.5	0.023
	PM	16.1	C	20.2	C	0.2	0.010
Tenth Street and Santa Clara Street	AM	11.6	B	11.6	B	0.0	0.004
	PM	18.4	C	18.4	C	0.1	0.002
Eleven Street and Santa Clara Street	AM	13.8	B	13.8	B	0.0	0.002
	PM	12.0	B	12.0	B	0.0	0.005
Almaden Boulevard and San Carlos Street*	AM	25.4	D	25.4	D	0.0	0.000
	PM	31.0	D	31.0	D	0.0	0.000
Market Street and San Carlos Street*	AM	27.4	D	27.4	D	0.0	0.001
	PM	33.9	D	34.0	D	0.1	0.001

Table V.B-10 *continued*

				Existing Plus Project Trips											Project Trips			
				Mixed-Flow Lanes					HOV Lane Traffic Volume						Mixed-Flow		HOV Lane	
Freeway	Segment	Direction	Peak Hour	Avg. Speed[a]	# of Lanes	Volume[a]	Density	LOS	Avg. Speed[a]	# of Lanes	Volume[a]	Density	LOS	Volume	% Capacity	Volume	% Capacity
SR 87	I-280 to Julian	NB	AM	67	2	2,864	21.4	C	–	–	–	–	–	54	1.2%	–	–
			PM	67	2	1,602	12.0	B	–	–	–	–	–	132	3.0%	–	–
SR 87	Julian to Coleman	NB	AM	9	2	2,301	127.8	F	–	–	–	–	–	141	3.2%	–	–
			PM	67	2	2,086	15.6	B	–	–	–	–	–	76	1.7%	–	–

[a] Source: Santa Clara Valley Transportation Authority Congestion Management Program Monitoring Study, 2001.

Notes: There are no HOV lanes on the freeway segments analyzed.

Shading indicates significant impact according to CMP standards.

In adddition, at the request of the City Department of Transportation, an analysis was performed that examined freeway segment conditions after the completion of the three-part SR 87 widening project. The first component of the widening project, a Caltrans project which is currently under construction, will convert the segment of SR 87 (Guadalupe Expressway) that is currently an arterial to a freeway. This segment, from Julian Street to US 101, will provide two mixed-flow lanes and one HOV lane upon completion of this project. This project is expected to be completed by next year. The second component on SR 87 will consist of the addition of an HOV lane in each direction on SR 87 from Julian Street to I-280. In addition, modifications to some of the SR 87 ramps at Julian Street are planned under this project. This is a 2-year VTA project scheduled to begin construction this fall. The third component, also a VTA project, would add HOV lanes in both directions on SR 87 from I-280 to SR 85. This project is scheduled to begin construction this fall, and it is a 2-year project.

The study segments of SR 87 were analyzed assuming the completion of the SR 87 freeway widening project, which will result in an HOV lane plus two mixed-flow lanes in each direction. As a conservative approach, ten percent of the total traffic volume on these freeway segments was assumed to use the HOV lanes. The result of this analysis shows that, after the completion of the SR 87 widening project, the same segments on SR 87 as mentioned above would continue to operate at unacceptable levels of service under project conditions, and therefore would continue to be impacted by the project. Tabular results of the SR 87 freeway analysis after the completion of the SR 87 freeway widening project are presented in Appendix B.1.

f. Interchange and Intersection Operations Analysis. The analysis of project intersection level of service was supplemented with an analysis of intersection *operations* for selected intersections. The operations analysis is based on vehicle queuing for high-demand turning movements at intersections. The basis of the analysis is as follows: (1) the TRAFFIX intersection analysis software is used to estimate the 95th percentile maximum number of queued vehicles per signal cycle for a particular movement; (2) the estimated maximum number of vehicles in the queue is translated into a queue length, assuming 20 feet per vehicle; and (3) the estimated maximum queue length is compared to the existing or planned available storage capacity for the movement. This analysis thus provides a basis for estimating future storage requirements at intersections.

An operational analysis was performed at the intersections where the project would add a significant number of left-turning vehicles. Most of these intersections, however, do not currently exist, but are future intersections that would be located within the project area. Thus, for the proposed signalized intersections, the minimum required queuing storage capacity was calculated. At the existing signalized intersections, the analysis indicated that the existing vehicle storage capacity would be adequate for the estimated maximum vehicle queues under project conditions. The TRAFFIX queue estimates and a tabulated summary of the findings are provided in Table V.B-11.

The Julian Street interchange with SR 87 was analyzed to determine its operating level under project conditions. Table V.B-12 shows the ramp volumes during peak hours compared to the capacities. It can be seen that the SR 87 ramps at Julian Street currently operate and would continue to operate within capacity under project conditions. Therefore, these ramps would not be impacted by the project.

g. General Plan Amendment Analysis. The General Plan amendments to change the land use designations in the project area as well as realign Julian Street have been evaluated as part of this

Table V.B-11: Vehicle Queuing and Storage Capacity

Intersection	Peak Hour	Mvmt.	Planned # Lanes	Total Existing Storage Feet	Background Vehicle Queue[a]	Project Vehicle Queue[a]	Total Required Storage Feet[b]	Comments
Market Street and Julian Street[c]	PM	WBL	0.5		16	16	320	One-way street, can store in entire length of street
	AM	NBL	1	120	1	2	40	Adequate storage provided
SR 87 and Julian (W)[c]	AM	SBL	1.5	1,060	11	14	280	Adequate storage provided
San Pedro Street and St. James Street[c]	PM	SBL	0.5		1	2	40	One-lane approach, can store in entire length of street
	PM	EBL	0.5		0	4	80	One-way street, can store in entire length of street
Market Street and St. James Street[c]	AM	SBL	1	160	4	5	100	Adequate storage provided
	AM	EBL	1.5		15	16	320	One-way street, can store in entire length of street
Terraine Street and Julian Street[d]	PM	WBL	N/A		5	19	380	Minimum storage capacity required
Terraine Street and Devine Street[d]	PM	SBL	N/A		0	1	20	Minimum storage capacity required
	PM	WBL	N/A		10	11	220	Minimum storage capacity required
San Pedro Street and Julian Street[d]	AM	WBL	N/A		1	2	40	Minimum storage capacity required
	PM	NBL	N/A		0	4	80	Minimum storage capacity required

[a] In number of vehicles, based on design vehicle queue calculated by TRAFFIX.

[b] Calculated based on TRAFFIX output as follows: [(Design Veh. Queue x Ave length of veh. (20')].

[c] Existing signalized intersection.

[d] Future intersection.

Source: Hexagon Transportation Consultants, 2003.

Table V.B-12: SR 87 and Julian Street Interchange Analysis – Project Conditions

Ramp	Peak Hour	Capacity (vph)	Queuing Capacity (ft.)	Existing Conditions	Project Conditions
NB Off-Ramp	AM	2,200	2,120	1,574	1,640
	PM			557	711
NB On-Ramp	AM	2,200	1,440	325	564
	PM			570	803
SB Off-Ramp	AM	2,200	1,660	411	628
	PM			204	446
SB On Loop-Ramp	AM	2,000	1,000	323	426
	PM			1,024	1,080
SB On-Ramp	AM	2,000	720	136	151
	PM			578	839

Source: Hexagon Transportation Consultants, 2003.

EIR. The long-term traffic analysis includes three scenarios: Scenario 1 involves a change to the current General Plan land use designation with no changes to the roadway network; Scenario 2 involves network changes only with no land use change; and Scenario 3 includes both the changes in land use and the network changes. A separate General Plan Amendment Traffic Analysis Report has been prepared by Hexagon Transportation Consultants and is provided as Appendix B.2 in Volume 2 of this EIR.

Two sets of roadway links operate at LOS E/F for the adopted General Plan base case under Scenarios 1 and 3. Eight sets of roadway links operate at LOS E/F for the adopted General Plan base case under Scenario 2, which involves network changes only. Under Scenarios 1 and 3, the proposed General Plan Amendment would cause the peak direction volume to increase by 1.50% or more on one of the link sets. Under Scenario 2, the proposed General Plan Amendment would cause the peak direction volume to increase by 1.50% or more on four of the link sets.

Therefore, based on impact criteria for the LOS E/F link analysis, the increases in volumes on these link sets as a result of any one of the three proposed General Plan Amendment Scenarios constitutes a significant adverse traffic impact. The changes in trips on the E/F links for Scenarios 1, 2 and 3 are shown in Tables 2a, 2b and 2c, respectively, in Appendix B.2.

Impacts from these proposed General Plan amendments would be reduced by conformance with General Plan policies, including Services and Facilities Level of Service Policy #5 which requires maintenance of LOS D during peak travel periods. Results of the traffic analysis indicate that the proposed amendment will add traffic to streets already identified as operating at unacceptable levels. According to the General Plan policy and impact criteria, this constitutes a significant impact. Although there is no mitigation yet identified, at the time a specific development application is submitted, a traffic impact study would identify any current condition deficiencies that would need to be mitigated to meet level of service policies. In accordance with the City's level of service policy, any impacts would then have to be mitigated before the project could be approved.

h. Other Transportation Issues.

(1) Pedestrian and Bicycle Operations. Pedestrian traffic will be primarily generated by residents to new and existing facilities within the project area and in the Downtown area. Fifty percent of the trips generated by the retail component of the project and 25 percent of the trips generated by the residential uses were estimated to be made by transit/walking. This equates to about 249 pedestrian trips during the AM peak hour and 333 pedestrian trips during the PM peak hour. The project proposes new sidewalks ranging from 10 to 25 feet wide along all streets within the project area. Downtown sidewalks are generally adequate to serve pedestrian demand. Currently, however, it is almost impossible for pedestrains to cross Julian Street, or for vehicular traffic at the intersection with San Pedro Street to make a northbound left-turn onto Julian Street. Within the project site, Julian Street does not provide any means for pedestrians to get from one side of the street to the other. The fast moving traffic, the poor sight distance due to its current S-curve shape, and the width of Julian Street are the main factors affecting both vehicular and pedestrian traffic along this roadway. With the proposed project, the existing Julian Street would be realigned and would provide two travel lanes only (instead of the existing 3-lane roadway). In addition, it would provide traffic signals at the intersections with San Pedro and Terraine Streets. This would create a more accessible Julian Street within the project area for both pedestrian and vehicular traffic. Also, as noted above, sidewalks would range from 10 to 25 feet wide along all other streets within the project area, facilitating pedestrian access and circulation. Therefore, the project would improve pedestrian access/safety by providing wider sidewalks within the project area, slowing traffic on Julian Street, providing signalized intersections with pedestrian heads along Julian and Terraine Streets, and eliminating the free southbound right-turn at the intersection of Market Street and Julian Street.

The project would generate a minimal number of bicycle trips. It would not affect any existing or planned bicycle facilities. It would provide slightly enhanced conditions for bicycles by slowing traffic on Julian Street.

(2) Transit Operations. Due to the project's downtown location, a significant number of trips are expected to be made by transit. A total of 249 AM peak hour trips and 333 PM peak hour trips were assumed to be made by either transit or walking. Given that the site is served by 13 bus routes plus LRT, these riders could be accommodated by the existing service. The closest bus stops and an LRT Station (St. James station) are located along First and Second Streets, between Julian Street and St. James Street.

As this area redevelops into a more intense residential area, VTA should consider providing enhanced transit connections to the project area. Currently there are no bus routes running within the project area. Most bus routes run along First Street and Second Street, while others run on Julian Street and St. James Street, east of First Street. VTA should consider running a bus route through Julian Street and St. James Street within the project area in order to provide closer bus stops. Another service provided by VTA, that is not currently provided near the project area, is the Downtown Area Weekday Shuttle (DASH) bus. DASH provides shuttle service to the Diridon CalTrain station. This shuttle provides service only to the Paseo De San Antonio and the Convention Center LRT stations via San Fernando Street and West San Carlos Street. VTA should consider expanding this service as well, to include the project area within the shuttle's service area.

C. AIR QUALITY

This section has been prepared using methodologies and assumptions recommended in the air quality impact assessment guidelines of the Bay Area Air Quality Management District (BAAQMD).[1] In keeping with these guidelines, this chapter describes existing air quality, impacts of future traffic on local carbon monoxide levels and impacts of land use related vehicular emissions that have regional effects. Mitigation measures to reduce or eliminate potentially significant air quality impacts are identified, where appropriate.

1. Setting

a. Air Pollution Climatology. The amount of a given pollutant in the atmosphere is determined by the amount of pollutant released and the atmosphere's ability to transport and dilute the pollutant. The major determinants of transport and dilution are wind, atmospheric stability, terrain, and for photochemical pollutants, sunshine.

Northwesterly and northerly winds are most common in the project area, reflecting the orientation of the Bay and the San Francisco Peninsula. Winds from these directions carry pollutants released by autos and factories from upwind areas of the Peninsula toward San Jose, particularly during the summer months. Winds are lightest on the average in fall and winter at which time local pollutants tend to build up in the atmosphere.

Pollutants can be diluted by mixing in the atmosphere both vertically and horizontally. Vertical mixing and dilution of pollutants are often suppressed by inversion conditions, when a warm layer of air traps cooler air close to the surface. During the summer, inversions are generally elevated above ground level, but are present over 90 percent of both the morning and afternoon hours. In winter, surface-based inversions dominate in the morning hours, but frequently dissipate by afternoon.

Topography can restrict horizontal dilution and mixing of pollutants by creating a barrier to air movement. The South Bay has significant terrain features that affect air quality. The Santa Cruz Mountains and Diablo Range on either side of the South Bay restrict horizontal dilution, and this alignment of the terrain also channels winds from the north to south, carrying air pollution from the northern Peninsula toward San Jose.

The combined effects of moderate ventilation, frequent inversions that restrict vertical dilution, and terrain that restricts horizontal dilution give San Jose a relatively high atmospheric potential for air pollution compared to other parts of the San Francisco Bay Air Basin.

b. Ambient Air Quality Standards. Both the U.S. Environmental Protection Agency and the California Air Resources Board have established ambient air quality standards for common pollutants. These ambient air quality standards are levels of contaminants which represent safe levels that avoid specific adverse health effects associated with each pollutant. The ambient air quality standards cover what are called "criteria" pollutants because the health and other effects of each pollutant are described in criteria documents.

[1] Bay Area Air Quality Management District, 1996. *BAAQMD CEQA Guidelines.*

The federal and State ambient air quality standards are summarized in Table IV.C-1 for important pollutants. The federal and State ambient standards were developed independently with differing purposes and methods, although both processes aim to prevent health-related effects. As a result, the federal and State standards differ in some cases. In general, the State standards are more stringent. This is particularly true for ozone and PM_{10}.

Table IV.C-1: Federal and State Ambient Air Quality Standards

Pollutant	Averaging Time	Federal Primary Standard	State Standard
Ozone	1-Hour	0.12 ppm	0.09 ppm
	8-Hour	0.08 ppm	–
Carbon Monoxide	8-Hour	9.0 ppm	9.0 ppm
	1-Hour	35.0 ppm	20.0 ppm
Nitrogen Dioxide	Annual	0.05 ppm	–
	1-Hour	–	0.25 ppm
Sulfur Dioxide	Annual	0.03 ppm	–
	24-Hour	0.14 ppm	0.05 ppm
	1-Hour	–	0.25 ppm
PM_{10}	Annual	50 µg/m³	20 µg/m³
	24-Hour	150 µg/m³	50 µg/m³
$PM_{2.5}$	Annual	15 µg/m³	12 µg/m³
	24-Hour	65 µg/m³	–

Notes: ppm = parts per million
µg/m³ = micrograms per cubic meter

Source: California Air Resources Board, 2003, *Ambient Air Quality Standards*.

The U.S. Environmental Protection Agency established new national air quality standards for ground-level ozone and for fine particulate matter in 1997. The existing 1-hour ozone standard of 0.12 ppm microns or less is to be phased out and replaced by an 8-hour standard of 0.08 ppm. Implementation of the 8-hour standard was delayed by litigation, but was determined to be valid and enforceable by the U.S. Supreme Court in a decision issued in February of 2001. However, the new federal ozone standard is not yet in effect pending final resolution of this litigation and adoption of implementing regulations.

In 1997 new national standards for fine Particulate Matter (diameter 2.5 microns or less) were adopted for 24-hour and annual averaging periods. The current PM_{10} standards were to be retained, but the method and form for determining compliance with the standards were to be revised. Implementation of this standard was delayed by litigation and will not occur until the U.S. Environmental Protection Agency has issued court-approved guidance.

In addition to the criteria pollutants discussed above, Toxic Air Contaminants (TACs) are another group of pollutants of concern. TACs are injurious in small quantities and are regulated despite the absence of criteria documents. The identification, regulation and monitoring of TACs is relatively recent compared to that for criteria pollutants.

c. Current Air Quality. The Bay Area Air Quality Management District (BAAQMD) monitors air quality at several locations within the San Francisco Bay Air Basin. The closest multi-pollutant monitoring site to the project site is located in downtown San Jose on Fourth Street. Table IV.C-2 summarizes exceedances of State and federal standards at this monitoring site during the period 1999-2001. Table IV.C-2 shows that ozone and PM_{10} exceed the State standards in the South Bay. Violations of the carbon monoxide standards had been recorded at the downtown San Jose site prior to 1992.

Of the three pollutants known to occasionally exceed the State and federal standards in the project area, two are regional pollutants. Both ozone and PM_{10} are considered regional pollutants in that concentrations are not determined by proximity to individual sources, but show a relative uniformity over a region. Thus, the data shown in Table IV.C-2 for ozone and PM_{10} provide a good characterization of levels of these pollutants on the project site.

Carbon monoxide is a local pollutant (i.e., high concentrations are normally only found very near sources). The major source of carbon monoxide—a colorless, odorless, poisonous gas—is automobile traffic. Elevated concentrations, therefore, are usually only found near areas of high traffic volumes.

d. Attainment Status. The federal Clean Air Act and the California Clean Air Act of 1988 require that the State Air Resources Board, based on air quality monitoring data, designate portions of the State where the federal or State ambient air quality standards are not met as "nonattainment areas". Because of the differences between the national and State standards, the designation of nonattainment areas is different under the federal and State legislation.

Table IV.C-2: Summary of Air Quality Data for Downtown San Jose

Pollutant	Standard	Days Exceeding Standard in: 1999	2000	2001
Ozone	Federal 1-Hour	0	0	0
Ozone	State 1-Hour	3	0	1
Ozone	Federal 8-Hour	0	0	0
Carbon Monoxide	State/Federal 8-Hour	0	0	0
Nitrogen Dioxide	State 1-Hour	0	0	0
PM_{10}	Federal 24-Hour	0	0	0
PM_{10}	State 24-Hour	5	2	2
$PM_{2.5}$	Federal 24-Hour	2	0	0

Source: California Air Resources Board, Aerometric Data Analysis and Management System (ADAM), 2003.

The Bay Area has attained all federal standards with the exception of ozone. In June of 1998 the U.S. Environmental Protection Agency reclassified the Bay Area from "maintenance area" to nonattainment for ozone based on violations of the federal standards at several locations in the air basin. This reversed the air basin's reclassification to "maintenance area" for ozone in 1995. Reclassification required an update to the region's federal air quality plan.

Under the California Clean Air Act, Santa Clara County is a nonattainment area for ozone and PM_{10}. The county is either attainment or unclassified for other pollutants. The California Clean Air Act requires local air pollution control districts to prepare air quality attainment plans. These plans must provide for district-wide emission reductions of five percent per year averaged over consecutive three-year periods or if not, provide for adoption of "all feasible measures on an expeditious schedule".

e. Sensitive Receptors and Toxic Air Contaminant Sources. The BAAQMD defines sensitive receptors as facilities where sensitive population groups (children, elderly, acutely and/or chronically ill) are likely to be located. These land uses include residences, schools, playgrounds, childcare centers, retirement homes, convalescent homes, hospitals, and medical clinics. The site and surrounding area currently contain no sensitive receptors. The closest off-site existing sensitive receptor is residential uses located east of Market Street (Villa Torino).

The latest inventory of major Toxic Air Contaminant sources prepared by the Bay Area Air Quality Management District shows no major sources in the vicinity of the proposed project site.[2]

[2] Bay Area Air Quality Management District, 2001, *Toxic Air Contaminant Control Program Annual Report 2000.*

2. Impacts and Mitigation Measures

The project would affect air quality both during construction and operation. Operational impacts would be mainly indirect (related to attracted vehicle trips). The project would also result in diversion of traffic on a changed roadway network, which would affect air quality locally.

a. Criteria of Significance. The document *BAAQMD CEQA Guidelines*[3] provides the following definitions of a significant air quality impact:

- Conflict with or obstruct implementation of an applicable air quality plan;
- Violate any air quality standard or contribute substantially to an existing or projected air quality violation;
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or State ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors);
- Expose sensitive receptors to substantial pollutant concentrations;
- Create objectionable odors affecting a substantial number of people: or
- Expose sensitive receptors or the general public to substantial levels of toxic air contaminants.

The BAAQMD significance threshold for construction dust impact is based on the appropriateness of construction dust controls. The BAAQMD guidelines provide feasible control measures for construction emission of PM_{10}. If the appropriate construction controls are to be implemented, then air pollutant emissions for construction activities would be considered less-than-significant.

b. Less-Than-Significant Impacts. Three less-than-significant impacts are discussed below.

(1) Carbon Monoxide Effects of Traffic. A screening form of the CALINE-4 computer simulation model was applied to selected intersections near the project site. The model results were used to predict the maximum one and eight-hour concentrations, corresponding to the one- and eight-hour averaging times specified in the State and federal ambient air quality standards for carbon monoxide. The screening model and the assumptions made in its use for this project are described in Appendix C of this EIR.

Table IV.C-3 shows the results of the CALINE-4 analysis for the peak one-hour and eight-hour traffic periods in parts per million (ppm). The one-hour values are to be compared to the federal one-hour standard of 35 ppm and the State standard of 20 ppm. The eight-hour values in Table IV.C-3 are to be compared to the State and federal standards of 9 ppm. Because new project traffic and diversion of traffic related to roadway modifications would not cause any new violations of the eight-hour standards for carbon monoxide, nor contribute substantially to an existing or projected violation, project impacts on local carbon monoxide concentrations are considered to be less than significant.

[3] Bay Area Air Quality Management District, 1996, *BAAQMD CEQA Guidelines*.

Table IV.C-3: Worst Case Carbon Monoxide Concentrations Near Selected Intersections, in PPM

Intersection	Existing (2003)		Existing + Background (2003)		Existing + Background + Project (2003)		Cumulative + Project (2010)	
	1-Hr	8-Hr	1-Hr	8-Hr	1-Hr	8-Hr	1-Hr	8-Hr
SR 87 Ramp/Julian Street (W)	12.4	7.6	12.5	7.7	12.7	7.6	10.5	6.5
First Street/Julian Street	11.2	6.7	11.2	6.8	11.4	6.9	9.7	5.9
Coleman Street/Taylor Street	12.9	8.0	13.5	8.4	13.6	8.4	11.2	6.9
an Pedro Street/Julian Street	11.7	7.1	11.7	7.2	11.8	7.2	9.9	6.0
SR 87 Ramp/Julian Street (E)	12.3	7.6	12.5	7.7	12.7	7.8	10.8	6.6
Julian Street/Terraine Street	–	–	–	–	11.7	7.1	9.7	5.9
Market Street/Julian Street	12.5	7.7	12.7	7.8	12.8	7.9	10.7	6.6
Market Street/Saint James Street	11.8	7.2	12.0	7.3	13.4	8.3	11.1	6.9
Most Stringent Standard	20.0	9.0	20.0	9.0	20.0	9.0	20.0	9.0

Source: Donald Ballanti, Certified Consulting Meteorologist, 2003.

(2) Odor Impacts. The project would not contain any major sources of odor, and would not be located in an area with existing odors. It therefore would not have the "potential to frequently expose members of the public to objectionable odors" and would be deemed to have a less-than-significant impact.

(3) Odors and Toxic Air Contaminants. The implementation of the proposed project would not result in any new sources of Toxic Air Contaminants and the project land uses would not be located near any existing major sources of Toxic Air Contaminants. The project would not have the potential to "expose sensitive receptors or the general public to substantial levels of Toxic Air Contaminants" and would be deemed to have a less-than-significant impact.

c. Significant Air Quality Impacts. Three significant air quality impacts related to construction period emissions and operational regional emissions would result from implementation of the project.

<u>Impact AQ-1</u>: Demolition and construction period activities could generate significant dust, exhaust, and organic emissions. (S)

The proposed project would require demolition of existing buildings and excavation/removal of substantial amounts of soil from the site. The physical demolition of existing structures, excavation of soil and other infrastructure improvements are construction activities with a high potential for creating air pollutants. In addition to the dust created during demolition and excavation, substantial dust emissions could be created as debris and soil is loaded into trucks for disposal.

After removal of existing structures, construction dust would continue to affect local air quality during construction of the project. Construction activities would generate exhaust emissions from vehicles/equipment and fugitive particulate matter emissions that would affect local air quality. Construction activities are also a source of organic gas emissions. Solvents in adhesives, non-water-base paints, thinners, some insulating materials and caulking materials would evaporate into the

atmosphere and would participate in the photochemical reaction that creates urban ozone. Asphalt used in paving is also a source of organic gases for a short time after its application.

Construction dust could affect local air quality during implementation of the project. The dry, windy climate of the area during the summer months creates a high potential for dust generation when and if underlying soils are exposed to the atmosphere.

The effects of construction activities would be increased dustfall and locally elevated levels of PM_{10} downwind of construction activity. Construction dust has the potential for creating a nuisance to nearby properties

Mitigation Measure AQ-1: Consistent with guidance from the BAAQMD, the following measures shall be required of construction contracts and specifications for the project.

Demolition. The following controls shall be implemented during demolition:

- Watering should be used to control dust generation during demolition of structures and break-up of pavement.
- Cover all trucks hauling demolition debris from the site.
- Use dust-proof chutes to load debris into trucks whenever feasible.

Construction. The following controls shall be implemented at all construction sites:

- Water all active construction areas at least twice daily and more often during windy periods; active areas adjacent to existing land uses shall be kept damp at all times, or shall be treated with non-toxic stabilizers or dust palliatives;
- Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least 2 feet of freeboard;
- Pave, apply water three times daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas, and staging areas at construction sites;
- Sweep daily (with water sweepers) all paved access roads, parking areas, and staging areas at construction sites; water sweepers shall vacuum up excess water to avoid runoff-related impacts to water quality;
- Sweep streets daily (with water sweepers) if visible soil material is carried onto adjacent public streets;
- Apply non-toxic soil stabilizers to inactive construction areas;
- Enclose, cover, water twice daily, or apply non-toxic soil binders to exposed stockpiles (dirt, sand, etc.);
- Limit traffic speeds on unpaved roads to 15 mph;
- Install sandbags or other erosion control measures to prevent silt runoff to public roadways;
- Replant vegetation in disturbed areas as quickly as possible.
- Install wheel washers for all exiting trucks, or wash off the tires or tracks of all trucks and equipment leaving the site; and

- Suspend excavation and grading activity when winds (instantaneous gusts) exceed 25 mph.

Implementation of these mitigation measures would reduce construction period air quality impacts to a less-than-significant level. (LTS)

Impact AQ-2: Project-related regional emissions would exceed the BAAQMD thresholds of significance for ozone precursors. (S)

Vehicle trips generated by the project would result in air pollutant emissions affecting the entire San Francisco Bay Air Basin. Regional emissions associated with project vehicle use have been calculated using the URBEMIS-2001 emission model. The methodology used in estimating vehicular emissions is described in Appendix C.

The incremental daily emission increase associated with project operational trip generation is identified in Table IV.C-4 for reactive organic gases and oxides of nitrogen (two precursors of ozone) and PM_{10}. The BAAQMD has established thresholds of significance for ozone precursors of 80 pounds per day. Proposed project emissions shown in Table IV.C-4 would exceed these thresholds of significance for ROG and NO_x, and therefore the proposed project would have a significant effect on regional air quality.

Table IV.C-4: Project Regional Emissions in Pounds Per Day

	Reactive Organic Gases	Nitrogen Oxides	PM_{10}
Project	176.6	146.0	82.9
Existing Uses Removed	12.9	11.9	6.8
Total	163.7	134.1	76.1
BAAQMD Significance Threshold	80.0	80.0	80.0

Source: Donald Ballanti, Certified Consulting Meteorologist, 2003.

The proposed project would be a high-density urban infill development and provide a mix of land uses that would promote non-auto travel. It would also be located in an area with good access to regional transit systems. The project would be also be consistent with the regional "Smart Growth" initiative that the BAAQMD (together with five other regional agencies) has recently implemented to encourage compact, in-fill development near public transit. The reduction in vehicle trips inherent in these design features is reflected in the analysis of regional impacts.

Mitigation Measure AQ-2: The *BAAQMD CEQA Guidelines* document identifies potential mitigation measures for various types of projects. The following are considered to be feasible and effective in further reducing vehicle trip generation and resulting emissions from the project:

- Provide neighborhood-serving shops and services within or adjacent to residential development.
- Provide transit facilities (e.g., bus bulbs/turnouts, benches, shelters).
- Provide shuttle service to regional transit system or multimodal center.
- Provide shuttle service to major destinations such as employment centers, shopping centers and schools.
- Provide bicycle lanes and/or paths, connected to community-wide network.
- Provide sidewalks and/or paths, connected to adjacent land uses, transit stops, and/or community-wide network.

- Provide satellite telecommunication centers in large residential developments.
- Provide secure and conveniently located bicycle and storage for residents.
- Wire each housing unit to allow use of emerging electronic communication technology.
- Implement feasible TDM measures including a ride-matching program, coordination with regional ridesharing organizations and provision of transit information. (SU)

The implementation of an aggressive trip reduction program with the appropriate incentives for non-auto travel can reduce project impacts by approximately 10 to 15 percent. A reduction of this magnitude would reduce PM_{10} emissions to below the BAAQMD significance threshold, but emissions of ozone precursors would still exceed the significance thresholds. There is no mitigation available to reduce the project's regional air quality impact by an additional 50 percent to a less than significant level. Therefore, the project's regional air quality impacts would remain significant.

D. NOISE

This section describes existing noise conditions in the vicinity of the site, describes criteria for determining the significance of noise impacts, and estimates the likely noise that would result from construction activities, vehicular traffic, aircraft, and other noise sources. Where appropriate, mitigation measures are recommended to reduce project-related noise impacts to a less-than-significant level.

A noise assessment study was prepared for the previously proposed West Julian Revitalization project by Brown-Buntin Associates, Inc. (BBAI).[1] The existing setting data, including ambient noise measurement results included in the BBAI report are used here. The full BBAI noise assessment is available at the City's Department of Planning, Building and Code Enforcement. The BBAI report also contains background information that will be useful to readers unfamiliar with the basics of acoustical analysis, including a description of the characteristics of sound, measurement of sound, psychological and physiological effects of noise, and audible noise changes.

1. Setting

This noise assessment follows the City of San Jose guidelines for the preparation of noise studies, outlined in the City's Noise Element and Municipal Code Noise Control Ordinance.

a. Overview of the Existing Noise Environment. The project is located in an urban area and is, therefore, influenced by several surrounding noise sources. Primary noise sources that affect the baseline noise level of the area include the following:

- Vehicle traffic on State Route 87 (SR 87, Guadalupe Parkway) and local traffic on the Market Street/Coleman Avenue overpass; and
- Railroad noise from the Union Pacific Railroad tracks adjacent to the northern boundary of the site and aircraft noise from the San Jose International Airport located approximately 1½ miles to the northwest.

(1) Existing Noise Measurement Levels. To determine the existing noise environment at the project site and in the vicinity, noise measurements were taken by BBAI at three representative locations within the project site over a 48-hour period to determine the existing noise environment. The measurement locations are shown in Figure V.D-1.

The noise measurements were made for a period of 48 continuous hours at each location. The detailed results of the measurements are included in the BBAI report; the results are summarized below. The descriptors shown in the tables are the L_1, L_{10}, L_{50}, and L_{90} levels (i.e., those levels exceeded 1 percent, 10 percent, 50 percent, and 90 percent of the time). Also shown are the maximum (L_{max}) and minimum (L_{min}) levels and the continuous equivalent-energy levels (L_{eq}), which are used to calculate the day/night average level (DNL or L_{dn}) or the community noise equivalent level (CNEL).[2] The 48-hour continuous measurements provide an overall profile of existing noise levels on the site from all noise sources.

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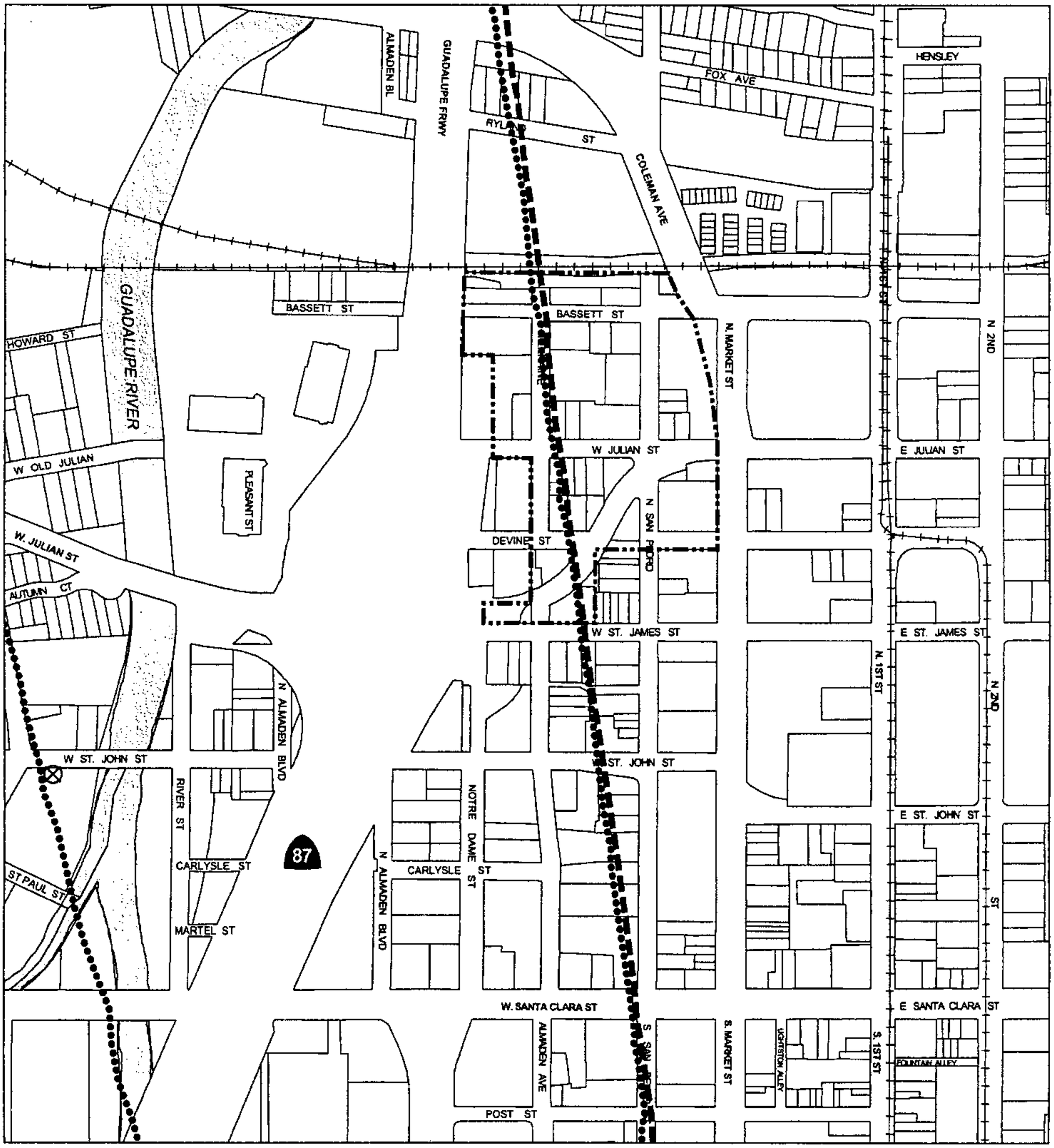
[1] Brown-Buntin Associates, Inc., 2001. *Environmental Noise Assessment, West Julian Revitalization Project,* February 28.

[2] The CNEL noise scale is similar to the L_{dn} noise scale (within 1 dBA of each other) and are usually interchangeable.



LSA

LEGEND

- NOISE MONITORING SITE
- SJIA EXISTING 65 CNEL CONTOUR (1ST QUARTER 2003)
- SJIA FUTURE 65 CNEL CONTOUR (MASTER PLAN 2010)
- PROJECT BOUNDARY

NOTE: WESTERN 65 CNEL CONTOUR FOR MASTER PLAN 2010 CONDITION FALLS OUTSIDE OF THIS MAP.

0 250 500
FEET

FIGURE V.D-1

Brandenburg Mixed Use Project/
North San Pedro Housing Sites
Noise Monitoring Sites and Aircraft Noise Contours

SOURCE: SAN JOSE INTERNATIONAL AIRPORT, 2003.

I:\IMAGES\GRAPHICS\JOBS\SJO230 BRANDENBURG\FIGURES\FIG_VD1.AI (08/15/03)

To evaluate the existing noise levels relative to the City of San Jose Noise Element standards, the CNEL/L_{dn} for the survey locations were calculated by decibel averaging of the hourly L_{eq} as they apply to the daily time periods of the CNEL/L_{dn} index. The mathematical formula used to calculate the CNEL/L_{dn} is shown in the BBAI report.

The CNEL/L_{dn} at the three noise monitoring locations ranged from 63 to 68 dBA. The highest noise levels were on the properties located on the northwest corner of the site, which are closer to the flight paths of arriving aircraft approaching the San Jose International Airport and to vehicle traffic on SR 87.

(2) Existing Aircraft Noise Levels. San Jose International Airport is located northwest of the project site. Noise exposure information in the community is developed for airport operations by the City of San Jose on a quarterly basis, based on current airport operations data and continuously measured noise levels. Aircraft noise exposure on the western half of the project site is within the 65 dBA CNEL contour under existing conditions.[3] The eastern half of the site is between the 65 dBA and 60 dBA CNEL contour. Figure V.D-1 illustrates these measurements.

On December 19 and 20, 2000, noise level measurements of aircraft flight were conducted on the project site by BBAI staff. Maximum single-event noise levels recorded on the project site from most of the aircraft ranged from 77 to 82 dBA. One measurement was as high as 85.9 dBA.

(3) Existing Rail Noise Levels. The Union Pacific rail line borders the northern boundary of the project site. Approximately three to four trains use the line per day. Although trains were observed during the noise monitoring, according to BBAI staff, it was not possible to accurately measure the train noise because of interference from aircraft noise. According to BBAI, slow-moving freight trains typically produce an average single-event noise level of 80 to 85 dBA at 100 feet. Assuming four trains per day (two daytime and two nighttime trains), the average CNEL/L_{dn} at 100 feet is likely to range from 44 to 40 dBA.

(4) Existing Traffic Noise Levels. Existing traffic noise levels were calculated using the Federal Highway Administration (FHWA) Highway Traffic Noise Prediction Model. Traffic data used in the model were obtained from the traffic impact analysis prepared by Hexagon Transportation Consultants, Inc. (April 2003). Table V.D-1 lists the calculated traffic noise levels in the project study area under the existing (2003) baseline conditions. Traffic noise in the project vicinity is generally low to moderate, except along Market Street and Julian Street, where the 70 and 65 dBA CNEL contours extend beyond the roadway right-of-way, into adjacent properties.

2. Impacts and Mitigation Measures

a. Criteria of Significance. A project will normally have a significant effect on the environment related to noise if it will substantially increase the ambient noise levels for adjoining areas or conflict with adopted environmental plans and goals of the community in which it is located. The applicable noise standards governing the project site are the criteria in the City's Noise Element of the General Plan. For the purposes of this project, a noise impact is considered significant if the project results in:

[3] The most recent measurements posted on the Airport Department website are excerpted from the First Quarter Noise Monitoring Report, ending March 31, 2003.

- Exposure of persons to or generation of noise levels in excess of standards established in the San Jose Zoning Ordinance Performance Standards for Noise, San Jose General Plan, or applicable standards of other agencies;
- Exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels;
- A substantial temporary, periodic, and/or permanent increase in ambient noise levels in the project vicinity above levels existing without the project; or
- For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

The standards within the City of San Jose Noise Element determine the acceptable noise environment for proposed residential uses. The long-range objective is an exterior L_{dn} of 55 dBA. The short-range exterior quality level is 60 dBA L_{dn}, with 76 dBA L_{dn} considered to be the maximum exterior noise level necessary to avoid significant adverse health effects. An interior noise quality level of 45 dBA L_{dn} has been established. The Noise Element recognizes that full attainment of noise standards may not be achievable in the environs of San Jose International Airport and the Downtown Core Area.

b. Less-Than-Significant Noise Impacts.

(1) Stationary Sources. The potential long-term stationary noise impacts at the project site would be primarily from the outdoor activities/operations at individual commercial uses on and adjacent to the project site.

As noise spreads from a source, it loses energy so that the farther away the noise receiver is from the noise source, the lower the perceived noise level would be. Geometric spreading causes the sound level to attenuate, resulting in a six-decibel reduction in the noise level for each doubling of distance from a single point source of noise to the noise receptor.

The proposed commercial uses could result in noise from mechanical equipment and other on-site sources (air-conditioning or other mechanical ventilation equipment, delivery loading docks or areas, emergency generators, etc.), which could create noise that emanates beyond their boundaries.

To evaluate the interior noise exposures in the proposed residential units, a 15 dBA reduction was applied to the exterior noise exposures to represent the attenuation provided by the building shell under annual-average conditions.[4] The annual-average condition assumes that windows have single-strength (3/32 inch) glass and are kept open up to 50 percent of the time for ventilation. Thus, the interior noise exposures in the living spaces that would be nearest to these noise sources were calculated to be within the limits of the City of San Jose Noise Element and Title 24 standards. No impact would result and no mitigation would be necessary.

(2) Rail Noise. Although the rail activity generates noise and groundborne vibration, the rail activity is intermittent. Approximately four trains per day use the Union Pacific rail line (two daytime and two nighttime trains). According to BBAI, four trains per day along this rail line would

[4] U.S. EPA, 1978. *Protective Noise Levels: Condensed Version of EPA Levels Document.* November.

Table V.D-1: Existing (2003) Baseline Traffic Noise Levels

Roadway Segment	ADT	Centerline to 70 CNEL (feet)	Centerline to 65 CNEL (feet)	Centerline to 60 CNEL (feet)	CNEL (dBA) 50 Feet from Outermost Lane
San Pedro Street					
Between Bassett St. and Julian St.	1,010	< 50	< 50	< 50	54.2
Between Julian St. and Devine St.	945	< 50	< 50	< 50	54.0
Between Devine St. and Saint James St.	1,500	< 50	< 50	< 50	56.0
South of Saint James St.	1,570	< 50	< 50	< 50	56.2
Market Street					
North of Julian St.	20,960	61	124	263	68.6
Between Julian St. and Devine St.	21,010	61	124	263	68.6
Between Devine St. and Saint James St.	18,270	57	113	240	68.0
South of Saint James St.	17,050	< 50	109	229	67.7
1st Street					
North of Julian St.	3,110	< 50	< 50	< 50	59.1
South of Julian St.	8,130	< 50	< 50	93	63.3
2nd Street					
North of Julian St.	3,500	< 50	< 50	53	59.6
South of Julian St.	4,480	< 50	< 50	62	60.7
3rd Street					
North of Julian St.	5,920	< 50	< 50	94	62.8
South of Julian St.	5,390	< 50	< 50	88	62.4
3rd Street					
North of Julian St.	12,840	< 50	73	156	66.1
South of Julian St.	12,340	< 50	71	152	66.0
Julian Street					
West of SR-78	32,620	80	165	352	70.5
East of SR-78	20,810	61	123	262	68.6
Between Terraine St. and San Pedro St.	5,830	< 50	< 50	74	61.9
Between San Pedro St. and Market St.	12,615	< 50	58	124	65.2
Between Market St. and 1st St.	9,565	< 50	< 50	103	64.0
Between 1st St. and 2nd St.	8,805	< 50	< 50	98	63.6
Between 2nd St. and 3rd St.	6,265	< 50	< 50	78	62.2
Between 3rd St. and 4th St.	6,045	< 50	< 50	76	62.0
East of 4th St.	5,230	< 50	< 50	69	61.4
Devine Street					
Between San Pedro St. and Market St.	675	< 50	< 50	< 50	52.5
East of Market St.	420	< 50	< 50	< 50	50.4
St James Street					
West of San Pedro St.	8,660	< 50	< 50	96	63.6
Between San Pedro St. and Market Street	8,410	< 50	< 50	95	63.4
East of Market St.	8,300	< 50	< 50	94	63.4
SR 87	75,000	264	564	1,214	77.9

Source: LSA Associates, Inc., April 2003.

result in an average Ldn at 100 feet of 44 to 49 dBA. As a result, rail activity would not exceed City time-averaged noise level standards for residential use. Therefore, no significant noise impacts from rail operations would occur. Slow-moving freight trains, however, typically produce single-event noise levels of approximately 80 to 85 dBA at a distance of 100 feet. This noise level could result in an interference in speech and disturb residents, if they are sleeping. Therefore, residential uses proposed on the north end of the project site would potentially be exposed to intermittent single-event train noise that may be viewed as an annoyance to the residents.

c. Significant Noise Impacts. Portions of the project site are exposed to noise levels generated by traffic on SR 87, aircraft noise, and railroad operations along the railroad tracks, which are above the City of San Jose's noise guidelines for residential, open space, and retail uses (45 dBA L_{dn} interior). Depending on where buildings are situated and how they are constructed, the interior of some buildings and associated outdoor spaces may experience noise levels that exceed appropriate noise standards.

Impact NOI-1: Aircraft noise levels would represent a significant adverse impact on project residents and park users. (S)

Aircraft from San Jose International Airport generate an annualized CNEL of 65 dBA CNEL or higher for the western half of the site. Buildout of the project and implementation of the Airport Master Plan would expose future residential occupants and park users to noise levels that would be approximately the same as existing conditions (see Figure V.D-1 for both existing and projected year 2010 noise contours). These noise levels would exceed the City's short-range noise quality standard of 60 dBA L_{dn} and for some buildings may exceed the interior noise standard of 45 dBA L_{dn} depending on the building design. Development of the proposed uses here would be considered an incompatible land use and the impact of aircraft noise levels would be considered significant.

Standard residential structures in northern California provide an exterior-to-interior noise reduction of 25 dBA with windows closed and 15 dBA with windows open. With windows closed, the proposed residential units would meet the 45 dBA CNEL interior noise standard (65 dBA - 25 dBA = 40 dBA). With windows open, however, there is a potential that these residential units would experience interior noise higher than the 45 dBA CNEL standard (65 dBA - 15 dBA = 50 dBA). An air-conditioning system, a form of mechanical ventilation, would be required for the proposed on-site residential units to ensure that windows can remain closed for prolonged periods of time and achieve the interior noise standard.

If outdoor activity areas (e.g., patios, balconies, common recreation areas) are included in the residential design, these features should be situated as much as possible on the east side of buildings so that structures will provide some noise shielding from aircraft activities at San Jose International Airport.

Typical new retail buildings with fixed windows provide a minimum of 30 dBA in noise reduction indoors. Therefore, it is likely that standard design measures will reduce interior noise levels to a less than significant impact for the proposed retail uses.

Mitigation Measure NOI-1a: The following policies contained in the City's 2020 General Plan serve to reduce significant noise impacts:

- Noise Policy 1: The City's acceptable noise level objectives are 55 dBA Ldn as the long-range exterior noise quality level, 60 dBA L_{dn} as the short-range exterior noise quality level, 45 dBA L_{dn} as the interior noise quality level, and 76 dBA L_{dn} as the maximum exterior noise level necessary to avoid significant adverse health effects. These objectives are established for the City, recognizing that the attainment of exterior noise quality levels in the environs of the San Jose International Airport, the Downtown Core Area, and along major roadways may not be achieved. To achieve the noise objectives, the City should require appropriate site and building design, building construction, and noise attenuation techniques in new residential development.
- Noise Policy 8: The City should discourage the use of outdoor appliances, air conditioners, and other consumer products that generate noise levels in excess of the City's exterior noise standards.
- Noise Policy 9: Construction operations should use available noise suppression devices and techniques.
- Noise Policy 11: When located adjacent to existing or planned noise sensitive residential land or public/quasi-public land use, nonresidential land uses should mitigate noise generation to meet the 55 dBA L_{dn} guidelines at the property line.
- Urban Design Policy 1: The City should continue to apply strong architectural and site design controls on all types of development for the protection and development of neighborhood character and for the proper transition between areas with different types of land uses.
- Urban Design Policy 21: To promote safety and minimize noise impacts in residential and working environments, development that is proposed adjacent to railroad lines should be designed to provide the maximum separation between the rail line and dwelling units, yards, or common open space areas; offices and other job locations; facilities for the storage of toxic or explosive materials; and the like. To the extent possible, areas of development closest to an adjacent railroad line should be devoted to parking lots, public streets, peripheral landscaping, the storage of nonhazardous materials, and so forth.
- Urban Design Policy 22: Design guidelines adopted by the City Council should be followed in the design of development projects.

Mitigation Measure NOI-1b: Implementation of the City of San Jose's Residential Design Guidelines and Commercial Design Guidelines by the City, the Redevelopment Agency, or individual property owners, as applicable, would help ensure that new development is compatible with existing and planned land uses. Potential impacts resulting from conflicts between future housing and adjacent commercial development and the railroad would be reduced through site-specific design measures such as setbacks, landscape buffers, noise attenuation, building orientations, and appropriate design features to screen incompatible uses. As indicated in Urban Design Policy 22, above, adherence to these policies is encouraged by the General Plan.

At the time future residential projects are proposed, the following measures shall be required:

- Preparation of a site-specific noise analysis by an acoustical consultant to determine specific design measures to reduce interior noise levels to conform to State Title 24 require-

ments. An outside-to-inside noise level reduction of at least 20 dBA should be used as a basis for achieving an interior noise level of 45 dBA L_{dn}. Design features that may be required could include the following: (1) use of sound-rated windows and exterior doors, (2) chimney caps on fireplaces, (3) stucco or cement plaster exterior construction as opposed to wood siding, and (4) air-conditioning or mechanical ventilation so that windows and door may remain closed.

- In order to reduce aircraft-related noise impacts, outdoor activity areas (e.g., patios, balconies, common recreation areas) should be situated as much as possible on the east side of buildings so that the residential structures could provide some noise shielding.
- Train noise impacts could be reduced by the construction of a sound wall, building orientation, building noise attenuation, and mechanical ventilation systems to reduce interior noise levels to acceptable levels.

Mitigation Measure NOI-1c: Prior to the issuance of building permits for development, the property owner(s) shall grant an avigation easement to the City of San Jose (in compliance with the ALUC Plan and City General Plan Aviation Policy #40), providing for acceptance of aircraft noise impacts.[5] (LTS)

Impact NOI-2: Whereas project-generated traffic noise would not represent a significant impact, the effect of existing and future traffic noise on project use would be significant. (S)

Noise impacts to existing land uses surrounding the development area would be limited to project-generated traffic. In order for the proposed project to measurably increase the baseline noise environment in the site vicinity, the proposed project would have to increase existing daily traffic volumes by at least 25 percent. A doubling of traffic volume would be required to create a "noticeable" traffic noise exposure increase. Typically, a volume of 5,000 vehicles per day traveling at 35 miles per hour (mph) generates a noise exposure of 60 dBA CNEL at 40 feet from the centerline of the road.

Implementation of the project would result in increased traffic on the road network. Projected future noise levels were calculated based on existing noise levels and the additional volumes projected in the traffic analysis. Peak-hour noise levels were then adjusted to reflect the predicted increase in traffic as a result of the project along roadways. The traffic generated from the project would be an incremental change relative to the entire volumes expected to be on the roadways. Table V.D-2 lists the traffic noise levels under the year 2010 baseline traffic conditions. Similar to the existing (2003) conditions, traffic noise along roadway segments in the project vicinity would be low to moderate, except along Market Street and Julian Street, where the 70 and 65 dBA CNEL extend beyond the roadway right-of-way.

Potential project-related traffic noise impacts are analyzed below.

[5] It should also be noted that a recent California law (passed and signed as AB 2776 of the 2002-03 regular session and known as the "Aviation Noise Disclosure" bill) now requires home sellers to disclose the fact that a house is "near" an airport if the house falls with a certain distance of an airport. The project site would be subject to this new requirement.

Table V.D-2: 2010 Baseline No Project Traffic Noise Levels

Roadway Segment	ADT	Centerline to 70 CNEL (feet)	Centerline to 65 CNEL (feet)	Centerline to 60 CNEL (feet)	CNEL (dBA) 50 Feet from Outermost Lane
Terrain Street					
Between Bassett St. and Julian St.	145	< 50 [a]	< 50	< 50	45.8
Between Julian St. and Devine St.	145	< 50	< 50	< 50	45.8
San Pedro Street					
Between Bassett St. and Julian St.	1,090	< 50	< 50	< 50	54.6
Between Julian St. and Devine St.	1,265	< 50	< 50	< 50	55.2
Between Devine St. and Saint James St.	2,395	< 50	< 50	< 50	58.0
South of Saint James St.	1,710	< 50	< 50	< 50	56.5
Market Street					
North of Julian St.	24,760	67	138	293	69.3
Between Julian St. and Devine St.	24,875	68	138	294	69.3
Between Devine St. and Saint James St.	29,955	65	131	294	69.0
South of Saint James St.	20,520	61	122	259	68.5
1st Street					
North of Julian St.	3,410	< 50	< 50	52	59.5
South of Julian St.	9,690	< 50	< 50	104	64.1
2nd Street					
North of Julian St.	3,700	< 50	< 50	56	60.0
South of Julian St.	4,790	< 50	< 50	65	61.0
3rd Street					
North of Julian St.	7,330	< 50	< 50	108	63.7
South of Julian St.	6,180	< 50	< 50	96	62.9
3rd Street					
North of Julian St.	14,380	< 50	79	168	66.6
South of Julian St.	14,230	< 50	78	167	66.6
Julian Street					
West of SR-78	36,970	86	179	383	71.1
East of SR-78	22,380	64	129	274	68.9
Between Terraine St. and San Pedro St.	6,450	< 50	< 50	79	62.3
Between San Pedro St. and Market St.	14,210	< 50	62	134	65.7
Between Market St. and 1st St.	10,975	< 50	53	113	64.6
Between 1st St. and 2nd St.	10,440	< 50	51	109	64.4
Between 2nd St. and 3rd St.	7,470	< 50	< 50	87	62.9
Between 3rd St. and 4th St.	7,120	< 50	< 50	85	62.7
East of 4th St.	6,040	< 50	< 50	80	62.0
Devine Street					
Between San Pedro St. and Market St.	345	< 50	< 50	< 50	49.6
East of Market St.	460	< 50	< 50	< 50	50.8
St James Street					
West of San Pedro St.	13,490	< 50	60	130	65.5
Between San Pedro St. and Market Street	12,075	< 50	56	120	65.0
East of Market St.	13,060	< 50	59	127	65.5
SR 87	75,000	264	564	1,214	77.9

[a] Traffic noise within 50 feet of roadway centerline requires site specific analysis.

Source: LSA Associates, Inc., April 2003.

Table V.D-3 lists the traffic noise levels under the existing (2003) plus project traffic conditions. Table V.D-4 lists the traffic noise levels under the year 2010 plus project traffic conditions.

Table V.D-3 shows that under existing (2003) plus project traffic conditions, existing noise sensitive uses in the project vicinity that are exposed to traffic noise exceeding the City's 60 dBA L_{dn} noise standard along Market Street and Julian Street would continue to be exposed to such traffic noise. The increase in traffic noise levels that is due to the project would be 0.3 dBA or less. Along roadway segments with more than 3 dBA project-related traffic noise increases, such as San Pedro Street and Devine Street, the 60 dBA CNEL is confined within the roadway right-of-way. Therefore, noise impacts at existing off-site noise sensitive uses resulting from the proposed project would be less than significant.

Table V.D-4 shows essentially the same outcome for the year 2010 with project. Existing noise sensitive uses in the project vicinity that are currently exposed to traffic noise exceeding the City's 60 dBA Ldn noise standard along Market Street and Julian Street would continue to be exposed to such traffic noise under the year 2010 plus project traffic. The increase in traffic noise levels over year 2010 baseline levels that is due to the project would be 0.4 dBA or less.

Along roadway segments with more than 3 dBA project-related traffic noise increases, such as Terraine Street, San Pedro Street and Devine Street, the 60 dBA CNEL is confined within the roadway right-of-way. Therefore, noise impacts at existing off-site noise sensitive uses resulting from the proposed project would be less than significant.

Noise levels on existing and realigned streets (i.e., Market Street, SR 87, St. James Street, Bassett Street, Devine Street, San Pedro Street, and Terraine Street) would, however, expose the proposed residential properties to noise levels that would exceed the City's short-range standard of 60 dBA L_{dn} exterior and, depending on the design of the future buildings, could exceed the City's interior standard of 45 dBA L_{dn}. Because the overall traffic noise in year 2010 along these roadway segments would be higher than under existing conditions, potential noise impacts and mitigation measures are determined based on the year 2010 plus project traffic conditions listed in Table V.D-4.

> Mitigation Measure NOI-2a: In the event that the proposed housing units are designed to include outdoor active uses, such as patios, backyards, or balconies, the following areas would require some form of sound attenuation feature in order to meet the City's short-range 60 dBA CNEL exterior noise standard.
>
> - Within 77 feet of Terraine Street centerline for Parcels A, B, C, D, and G
> - Within 99 feet of Terraine Street centerline for Parcel J
> - Within 55 feet of San Pedro Street centerline for Parcels K, L1, and L2
> - Within 294 feet of Market Street centerline for Parcels F and H
> - Within 305 feet of Market Street centerline for Parcels L1 and L2
> - Within 277 feet of Julian Street centerline for Parcel G
> - Within 82 feet of Julian Street centerline for Parcels J, K, and N

Table V.D-3: Existing (2003) Plus Project Traffic Noise Levels

Roadway Segment	ADT	Centerline to 70 CNEL (feet)	Centerline to 65 CNEL (feet)	Centerline to 60 CNEL (feet)	CNEL (dBA) 50 Feet from Outermost Lane	Change From No Project Level (dBA)
Terrain Street						
Between Bassett St. and Julian St.	6,065	< 50 [a]	< 50	76	62.0	N/A[b]
Between Julian St. and Devine St.	8,455	< 50	< 50	95	63.5	N/A
San Pedro Street						
Between Bassett St. and Julian St.	1,970	< 50	< 50	< 50	57.1	N/A
Between Bassett St. and Julian St.	1,525	< 50	< 50	< 50	56.0	1.8
Between Julian St. and Devine St.	3,645	< 50	< 50	< 50	59.0	5.8
Between Devine St. and Saint James St.	3,765	< 50	< 50	54	60.0	4.0
South of Saint James St.	2,330	< 50	< 50	< 50	57.9	1.7
Market Street						
North of Julian St.	21,080	62	124	264	68.6	0.0
Between Julian St. and Devine St.	21,435	62	126	267	68.7	0.1
Between Devine St. and Saint James St.	18,425	57	114	241	68.0	0.0
South of Saint James St.	17,720	56	111	235	67.9	0.2
1st Street						
North of Julian St.	3,280	< 50	< 50	51	59.4	0.3
South of Julian St.	8,620	< 50	< 50	96	63.6	0.3
2nd Street						
North of Julian St.	3,500	< 50	< 50	53	59.6	0.0
South of Julian St.	4,480	< 50	< 50	62	60.7	0.0
3rd Street						
North of Julian St.	6,060	< 50	< 50	95	62.9	0.1
South of Julian St.	5,520	< 50	< 50	89	62.5	0.1
3rd Street						
North of Julian St.	12,840	< 50	73	156	66.1	0.0
South of Julian St.	12,590	< 50	72	154	66.0	0.0
Bassett Street						
West of Terraine St.	830	< 50	< 50	< 50	53.4	N/A
Between Terraine St. and San Pedro St.	965	< 50	< 50	< 50	54.0	N/A
East of San Pedro St.	1,370	< 50	< 50	< 50	55.6	N/A
Julian Street						
West of SR-78	34,890	83	172	368	70.8	0.3
East of SR-78	21,090	62	124	264	68.6	0.0
Between Terraine St. and San Pedro St.	6,100	< 50	< 50	76	62.1	0.2
Between San Pedro St. and Market St.	12,380	< 50	57	122	65.1	-0.1
Between Market St. and 1st St.	9,940	< 50	< 50	106	64.2	0.2
Between 1st St. and 2nd St.	9,615	< 50	< 50	103	64.0	0.4
Between 2nd St. and 3rd St.	7,700	< 50	< 50	89	63.1	0.9
Between 3rd St. and 4th St.	5,775	< 50	< 50	74	61.8	-0.2
East of 4th St.	5,870	< 50	< 50	75	61.9	0.5
Devine Street						
East of Terraine St.	860	< 50	< 50	< 50	53.5	N/A
Between San Pedro St. and Market St.	2,480	< 50	< 50	< 50	58.1	5.6
East of Market St.	1,350	< 50	< 50	< 50	55.5	5.1
St James Street						
West of San Pedro St.	9,210	< 50	< 50	101	63.8	0.2
Between San Pedro St. and Market St.	10,020	< 50	< 50	106	64.2	0.8
East of Market St.	8,870	< 50	< 50	98	63.7	0.3
SR 87	75,000	264	564	1,214	77.9	0.0

[a] Traffic noise within 50 feet of roadway centerline requires site specific analysis.
[b] No traffic exists under the existing baseline conditions.

Source: LSA Associates, Inc., April 2003.

Table V.D-4: 2010 Plus Project Traffic Noise Levels

Roadway Segment	ADT	Centerline to 70 CNEL (feet)	Centerline to 65 CNEL (feet)	Centerline to 60 CNEL (feet)	CNEL (dBA) 50 Feet from Outermost Lane	Change From No Project Level (dBA)
Terrain Street						
Between Bassett St. and Julian St.	6,210	< 50 [a]	< 50	77	62.1	16.3
Between Julian St. and Devine St.	8,975	< 50	< 50	99	63.7	17.9
San Pedro Street						
North of Bassett St.	1,970	< 50	< 50	< 50	57.1	N/A[b]
Between Bassett St. and Julian St.	3,210	< 50	< 50	< 50	59.3	4.7
Between Julian St. and Devine St.	3,735	< 50	< 50	55	59.9	4.7
Between Devine St. and Saint James St.	2,845	< 50	< 50	< 50	58.7	0.7
South of Saint James St.	4,670	< 50	< 50	64	60.9	4.4
Market Street						
North of Julian St.	24,880	68	138	294	69.3	0.0
Between Julian St. and Devine St.	26,195	70	143	305	69.6	0.3
Between Devine St. and Saint James St.	23,110	65	132	280	69.0	0.0
South of Saint James St.	21,940	63	128	271	68.8	0.3
1st Street						
North of Julian St.	3,580	< 50	< 50	54	59.8	0.2
South of Julian St.	10,180	< 50	< 50	107	64.3	0.2
2nd Street						
North of Julian St.	3,770	< 50	< 50	56	60.0	0.0
South of Julian St.	4,7690	< 50	< 50	65	61.0	0.0
3rd Street						
North of Julian St.	7,470	< 50	52	109	63.8	0.0
South of Julian St.	6,310	< 50	< 50	98	61.0	0.0
3rd Street						
North of Julian St.	14,380	< 50	78	168	63.8	0.1
South of Julian St.	14,480	< 50	79	98	63.0	0.1
Bassett Street						
West of Terraine St.	940	< 50	< 50	< 50	53.9	N/A
Between Terraine St. and San Pedro St.	910	< 50	< 50	< 50	53.8	N/A
East of San Pedro St.	1,370	< 50	< 50	< 50	55.6	N/A
Julian Street						
West of SR-78	39,240	89	186	398	71.3	0.0
East of SR-78	22,660	64	130	277	68.9	0.1
Between Terraine St. and San Pedro St.	6,720	< 50	< 50	82	62.5	0.3
Between San Pedro St. and Market St.	13,975	< 50	62	133	65.7	0.4
Between Market St. and 1st St.	11,350	< 50	54	115	64.7	0.3
Between 1st St. and 2nd St.	11,250	< 50	54	115	64.7	0.4
Between 2nd St. and 3rd St.	8,115	< 50	< 50	92	63.3	N/A
Between 3rd St. and 4th St.	7,640	< 50	< 50	89	63.0	9.2
East of 4th St.	6,680	< 50	< 50	81	62.4	8.4
Devine Street						
East of Terraine St.	860	< 50	< 50	< 50	53.5	N/A
Between San Pedro St. and Market St.	2,865	< 50	< 50	< 50	58.8	9.2
East of Market St.	3,180	< 50	< 50	< 50	59.2	8.4
St James Street						
West of San Pedro St.	13,290	< 50	60	128	65.4	-0.1
Between San Pedro St. and Market St.	13,310	< 50	60	128	65.4	0.4
East of Market St.	12,880	< 50	59	126	65.3	-0.1
SR 87	75,000	264	564	1,214	77.9	0.0

[a] Traffic noise within 50 feet of roadway centerline requires site specific analysis.
[b] No traffic exists under the 2010 baseline conditions.

Source: LSA Associates, Inc., April 2003.

- Within 133 feet of Julian Street centerline for Parcels H and L1
- Within 1,214 feet of SR 87 centerline for Parcels A, C, G, J, and M

Standard residential construction in northern California would provide 25 dBA exterior-to-interior noise reduction with windows closed and 15 dBA noise reduction with windows open. Therefore, residential structures outside of the 70 dBA CNEL contour range would meet the 45 dBA interior noise standard without building facade upgrades. However, to ensure that windows can remain closed for prolonged periods of time, an air-conditioning system is required.

Mitigation Measure NOI-2b: All proposed residential buildings within the areas listed above would require air-conditioning systems to meet the City's short-range 60 dBA CNEL exterior noise standard.

Mitigation Measure NOI-2c: Development in the following areas that would experience traffic noise exceeding 70 dBA CNEL would require additional building facade upgrades, such as double-paned windows with a minimum sound transmission class (STC) rating of STC-30, which is higher than what the standard residential construction provides:

- Within 68 feet of Market Street centerline for Parcels F and H
- Within 70 feet of Market Street centerline for Parcels L1 and L2
- Within 64 feet of Julian Street centerline for Parcel G
- Within 264 feet of SR 87 centerline for Parcels A, C, and G

Impact NOI-3: Construction period activities could create significant short-term noise impacts. (S)

Noise levels from construction activities such as finished grading and building erection for the proposed project may range up to 91 dBA L_{max} at 50 feet from the active construction area for a limited time period. However, no existing residential homes are located immediately adjacent to the project site.

The transport of workers and construction equipment and materials to the project site would incrementally increase noise levels on access roads leading to the site. Workers and construction equipment would use existing routes. Therefore, noise from passing trucks (87 dBA L_{max} at 50 feet) would be similar to existing truck-generated noise. Short-term intermittent noise from trucks would be minor and less than significant when averaged over a longer time period. In addition, noise associated with on-road vehicles is regulated by federal and state governments and is exempted from local government regulations.

Noise generated during excavation, grading, and building erection on the project site would result in potential noise impacts to off-site uses and to on-site uses if they were to occupy the site while later phases of construction were continuing. Existing tenants in the project vicinity may also experience short-term noise generated by construction equipment and activities on the project site when construction occurs near the project boundary.

Construction is performed in discrete steps, each of which has its own mix of equipment and, consequently, its own noise characteristics. Despite the variety in the type and size of construction equipment, similarities in the dominant noise sources and patterns of operation allow construction-related noise ranges to be categorized by work phase. Table V.D-5 lists typical construction equipment noise levels recommended for use in noise impact assessments, based on a distance of 50 feet between the equipment and a noise receptor. Typical construction noise levels vary up to a maximum of 91 dBA L_{max} at 50 feet during the noisiest construction phases. The site preparation phase, which includes excavation and grading of the site, tends to generate the highest noise levels because the noisiest construction equipment is earthmoving equipment. Earthmoving equipment includes excavating machinery such as backhoes, bulldozers, draglines, and front loaders and earthmoving and compacting equipment, which includes compactors, scrapers, and graders. Typical operating cycles for these types of construction equipment may involve one or two minutes of full power operation followed by 3-4 minutes at lower power settings.

Table V.D-5: Typical Construction Equipment Noise Level

Type of Equipment	Range of Sound Levels Measured (dBA at 50 feet)	Suggested Sound Levels for Analysis (dBA at 50 feet)
Pile Drivers	81 to 96	93
Rock Drills	83 to 99	96
Jackhammers	75 to 85	82
Pneumatic Tools	78 to 88	85
Pumps	68 to 80	77
Dozers	85 to 90	88
Tractors	77 to 82	80
Front-End Loaders	86 to 90	88
Hydraulic Backhoe	81 to 90	86
Hydraulic Excavators	81 to 90	86
Graders	79 to 89	86
Air Compressors	76 to 86	86
Trucks	81 to 87	86

Source: Bolt, Beranek & Newman 1987. Noise Control for Buildings and Manufacturing Plants.

Construction of the proposed project is expected to require the use of earthmovers such as bulldozers and scrapers, loaders and graders, water trucks, and pickup trucks. Pile drivers and rock drills are not expected to be used on a regular basis during construction. As shown in Table V.D-7, the typical maximum noise level generated by each earthmover on the proposed project site is assumed to be 88 dBA L_{max} at 50 feet from the operating earthmover. The maximum noise level generated by water and pickup trucks is approximately 86 dBA L_{max} at 50 feet from these vehicles. Each doubling of the sound sources with equal strength would increase the noise level by 3 dBA. Assuming each piece of construction equipment operates at some distance apart from the other equipment, the worst-case combined noise level at the nearest residences during this phase of construction would be 91 dBA L_{max} at a distance of 50 feet from an active construction area.

No residential uses are located immediately adjacent to the project area. The closest existing sensitive receptor would be the multifamily housing project located east of the Market Street/ Coleman Avenue overpass, which is located over 120 feet from the nearest project boundary. Therefore, general construction noise impacts would be less than significant.

Pile driving may be required, which could generate noise levels above 90 dBA L_{max} and ground vibration. Noise associated with pile driving is a very loud and impulsive sound, resulting from a large hammer that drops on steel or reinforced concrete piles. Individual noise impacts are of short duration (under one second), but the noise is repetitive, occurring about once every two seconds. Pile driving also generates vibration that is perceptible at a distance of 100 feet but would not generally be

expected to cause damage to other properties. (The potential exception to this rule would be historic structures, as discussed in this chapter, in Section I, Cultural Resources.)

Mitigation Measure NOI-3: Implementation of the following multi-part measure would reduce potential construction period noise impacts to less-than-significant levels:

- Construction activities will be limited to daytime hours (7 a.m. to 7 p.m. weekdays) for any construction within 500 feet of a residence.
- All internal combustion engines for construction equipment used on the site will be properly muffled and maintained.
- In the event that pile driving is proposed, nearby residents will be notified of the schedule for its use while it is in use. Portable acoustical barriers will be installed around pile driving equipment.
- A name, address, and phone number of a contact person will be posted on the site to handle noise complaints.
- Unnecessary idling of internal combustion engines will be prohibited.
- All stationary noise generating construction equipment, such as air compressors and portable power generators, will be located as far as practical from existing residences. (LTS)

E. SHADE AND SHADOW

1. Setting

Existing buildings on the 14-parcel project site are one and two stories in height (see Chapter V.A, Land Use for a detailed description and Figures V.A-1 through V.A-9 for illustrative photographs). As such, no significant shade or shadows are cast onto adjacent or nearby properties.

There are also a limited number of street trees on the site (see Figure V.G-1), none of which are wide or tall enough to cast significant adverse shade or shadows.

2. Impacts and Mitigation Measures

Implementation of the proposed Brandenburg Mixed Use Project has the potential to create shade and shadow impacts onto nearby public or private open space between September and March.

Shade and shadow impacts occur when a structure's height or its width (or a combination of these two characteristics) reduces the access to sunlight enjoyed by another property. It should be remembered that in a built urban environment like a downtown, nearly all land uses create for others and, in turn, are subject to shade and shadows from neighboring structures. The maximum height of structures in the project area would be 173 feet. During the summer months in San Jose, shading may even be desirable.

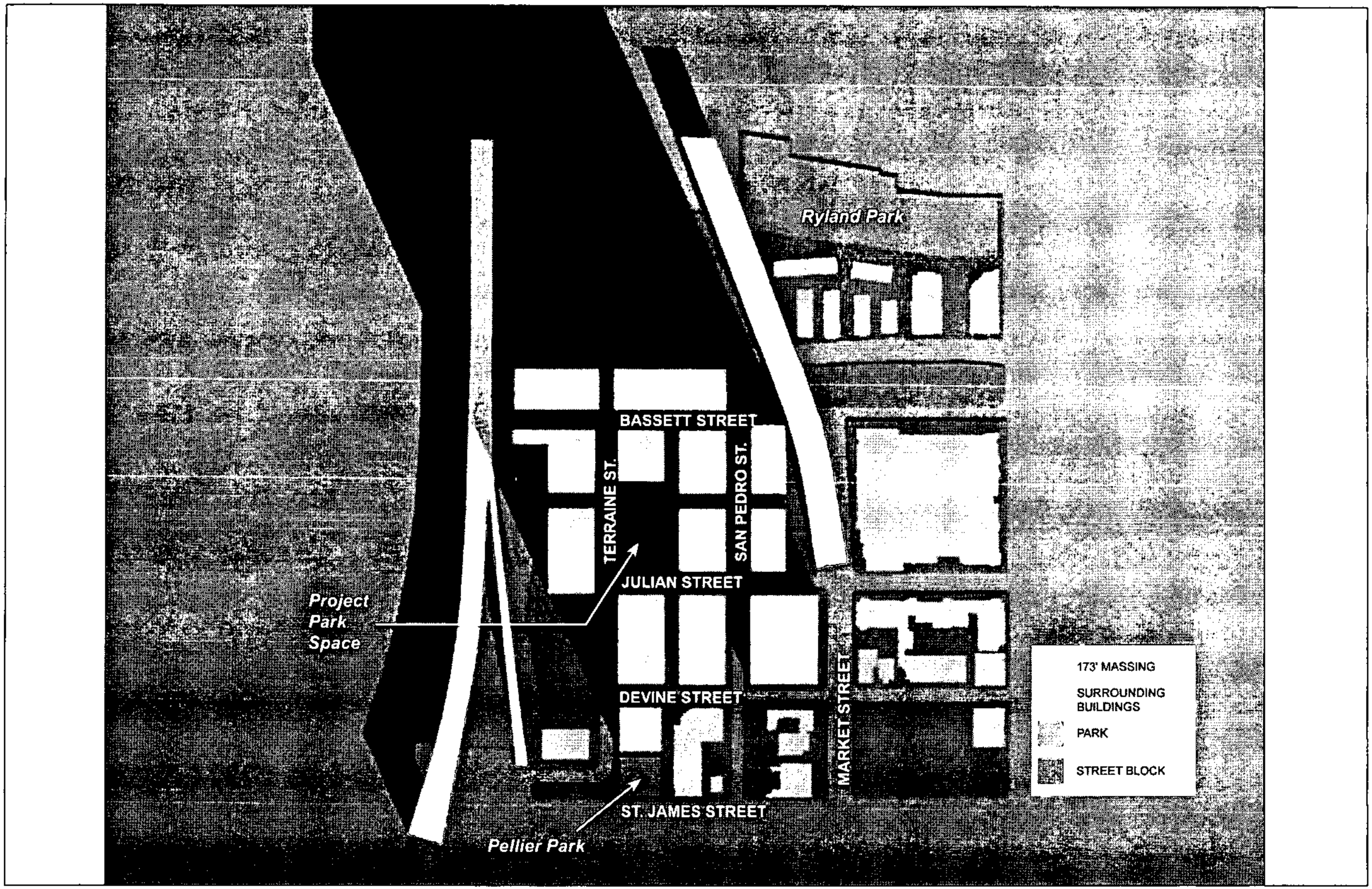
The City of San Jose has historically identified significant shade and shadow impacts as occurring when a building or other structure substantially reduces natural sunlight on private or public open spaces, measured on the first day of winter and on the days of the two equinoxes (June 21st and March 21st). The Final Downtown Strategy Plan EIR identifies six major open space areas[1] within the Downtown where future development could result in shade and shadow impacts. None of these six major areas are near enough to the project site that shade and shadow cast by the proposed development would reach them. The nearest existing public open space and park areas include Pellier Park on the southern end of the site and Ryland Park, approximately 500 feet northeast of the nearest edge of the project site. The project proposes park space in the center of the 14-block site, generally between Terraine and North San Pedro Streets and north of the realigned extension of Julian Street.

a. Criteria of Significance. The Brandenburg Mixed Use Project would have a significant shade and shadow impact if it would:

- Result in a 10 percent or greater increase in the shadow cast onto of any of the major open space areas in the Downtown San Jose area.
- Substantially shadow other public open space (beyond the major open space areas) but excluding streets and sidewalks or private open space between September and March.

b. Methods. A series of shadow simulation studies was prepared for the Brandenburg Mixed Use Project for shadows that would be cast on each of these three days of the year. Figures V.E-1, V.E-2,

[1] These six areas include the following: St. James Park, Guadalupe River Park, Corona Plaza, Plaza de Cesar Chavez, San Antonio Plaza and Confluence Point at Guadalupe River Park.



LSA

FIGURE V.E-1

Brandenburg Mixed Use Project/
North San Pedro Housing Sites
Shadow Simulation Study,
December 21st, 9:00 AM

SOURCE: DESIGN & PERMITTING, CITY OF SAN JOSE REDEVELOPMENT AGENCY, 2003.

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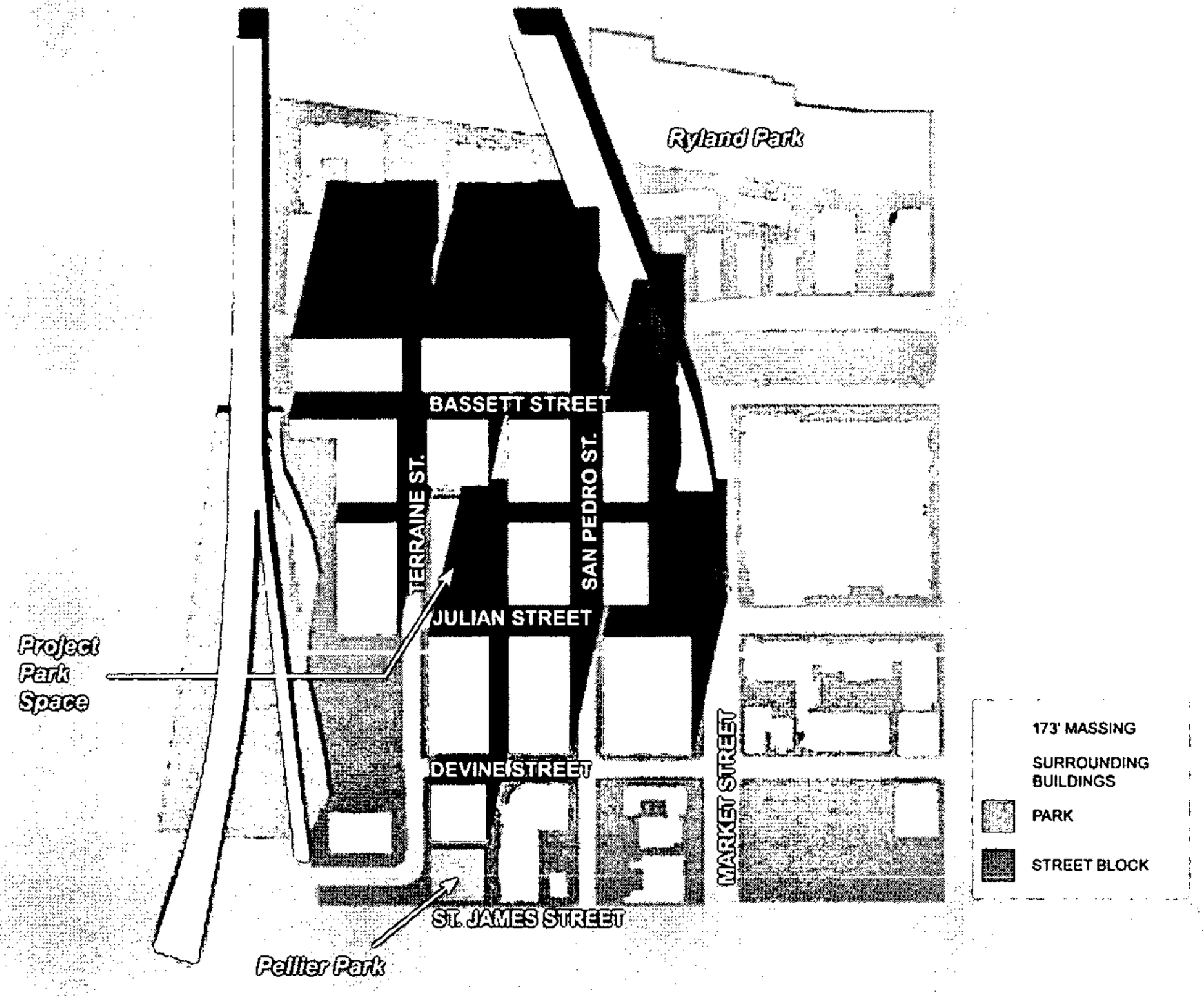

LSA

FIGURE V.E-2

Brandenburg Mixed Use Project/
North San Pedro Housing Sites
Shadow Simulation Study,
December 21st, 12:00 Noon

SOURCE: DESIGN & PERMITTING, CITY OF SAN JOSE REDEVELOPMENT AGENCY, 2003.

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and V.E-3 present the results of these simulations for the worst case condition (when the shadows are longest and the temperatures lowest), in mid-December, at 9:00 a.m., 12:00 noon, and 3:00 p.m., the times of day when both workers and residents are likely to run errands, stroll through open space areas and parks, or eat lunch.

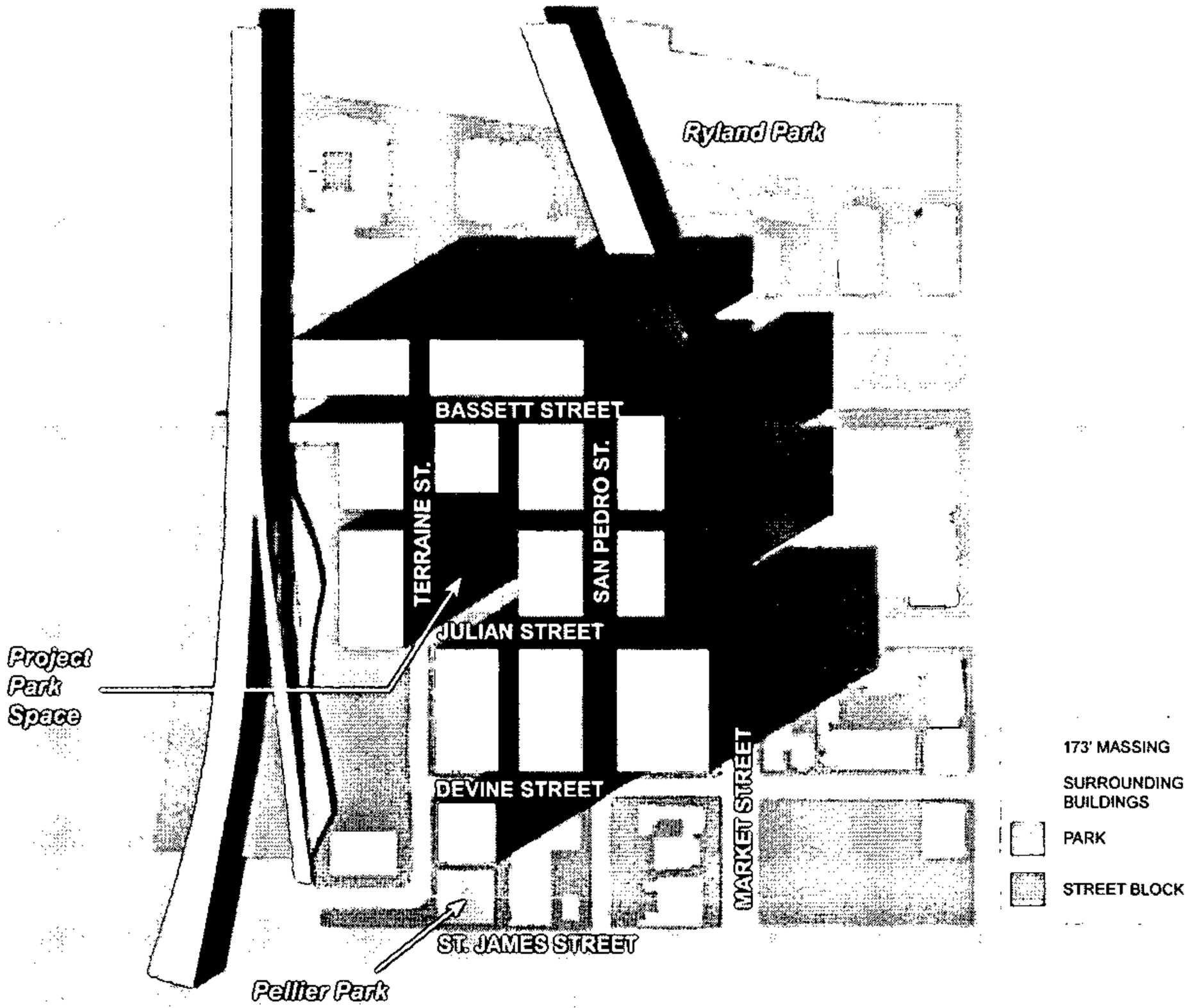
c. Less-than-Significant Shade and Shadow Impacts. As shown in the shade and shadow study diagrams, no substantial shading of either Ryland Park or Pellier Park would occur under even the worst case conditions presented in the December time period.

The public open space proposed for development within the site itself would experience between approximately 75 percent and 100 percent shading at various times of day during the winter months. However, this space is part of the proposed project and would be subject to the following 2020 General Plan goals and policies that relate to urban design and, indirectly, shade and shadow impacts:

- *Urban Design Policy 1* – The City should continue to apply strong architectural and site design controls on all types of development for the protection and development of neighborhood character and for the proper transition between areas with different types of land uses.
- *Urban Design Policy 6* – Proposed structures adjacent to existing residential areas should be architecturally designed and sited to protect the privacy of the existing residents.
- *Urban Design Policy 22* – Design guidelines adopted by the City Council should be followed in the design of development projects.

The identified General Plan mitigation measures would further ensure that shade and shadow effects of the proposed project would remain less than significant.

d. Significant Shade and Shadow Impacts. No significant impacts would arise.



LSA

FIGURE V.E-3

Brandenburg Mixed Use Project/
North San Pedro Housing Sites
Shadow Simulation Study,
December 21st, 3:00 PM

SOURCE: DESIGN & PERMITTING, CITY OF SAN JOSE REDEVELOPMENT AGENCY, 2003.

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F. AESTHETICS

This section addresses the subject of aesthetics and visual quality. It includes a description of existing visual conditions and an evaluation of the potential aesthetic effects of the proposed Brandenburg Mixed Use Project. The visual analysis is based on field observations of the Project site and surroundings in addition to review of the following materials: Project site plan (Figure III-7), aerial (Figure V.A-7), and ground-level photographs of the Project area, topographic data, and public planning documents.

1. Setting

a. Regional and Local Landscape Context. The proposed project site is situated approximately 20 miles southeast of the San Francisco Bay in the City of San Jose, which is characterized by large-scale urban development. The surrounding Santa Clara Valley is surrounded by grassy hills interspersed with trees that gradually become steeper and densely wooded. The northern extension of the Santa Cruz Mountains encloses the Valley to the southwest and contains peaks of 3,000 feet in elevation. The Diablo Mountain Range forms the eastern Valley boundary and reaches a summit elevation of almost 4,000 feet. The natural landscape of the surrounding mountains forms a distant scenic backdrop for the City's urban development. However, the majority of the surrounding area contains multiple-story urban development that forms a visual boundary between the neighboring cities and distant mountains.

b. Project Site. The project site is located in a highly urbanized area of San Jose and is visually characterized by a variety of commercial and light industrial development. The site's topography is flat with virtually no existing natural vegetation. Several older structures pre-dating the turn of the century are interspersed with newer buildings of varying ages and styles, including a 2½ story Victorian and one-story concrete warehouse structures. Due to the variety of uses, and the differing age, styles, and condition of the buildings, there is a lack of unifying character or cohesive architectural style in the area. Many of the industrial buildings in the project area are in poor condition and are currently boarded up or in stages of demolition. Streetscaping such as trees and grass exist within the project site and in vicinity (see Chapter V-G, Vegetation and Wildlife for a detailed description).

Figures V.F-1 through V.F-6 present photographs of views from, and within, the Project site. (See also Figures V.A-1 through V.A-9 in the Land Use section of this chapter for additional views of the site and vicinity.) **Figure V.F-1** looks west across N. San Pedro Street and an at-grade parking lot toward the Davidson Building (not part of the project site). **Figure V.F-2** looks southwest from the corner of N. San Pedro Street and the split of Julian Street and shows multi-story office buildings in the distance, on the west side of SR 87. **Figure V.F-3** is a view from the initial incline of Coleman Street, north of Julian Street, looking southwest over a parking lot and toward the split of Julian Street and the Davidson Building in the background. **Figure V.F-4** looks northwest from the incline of Coleman Street and shows one of the industrial buildings on the site. **Figure V.F-5** looks south down Terraine Street and shows the Davidson Building on the right. **Figure V.F-6** provides a view of the Downtown San Jose skyline looking south from a little farther up the incline of Coleman Street; the northern edge of the project site is visible in the foreground.

Each of these views illustrates the wide variety of existing views to and from the project site.

Figure V.F-1: View of Parking Lot and Davidson Building (Adjacent to Site) Looking West

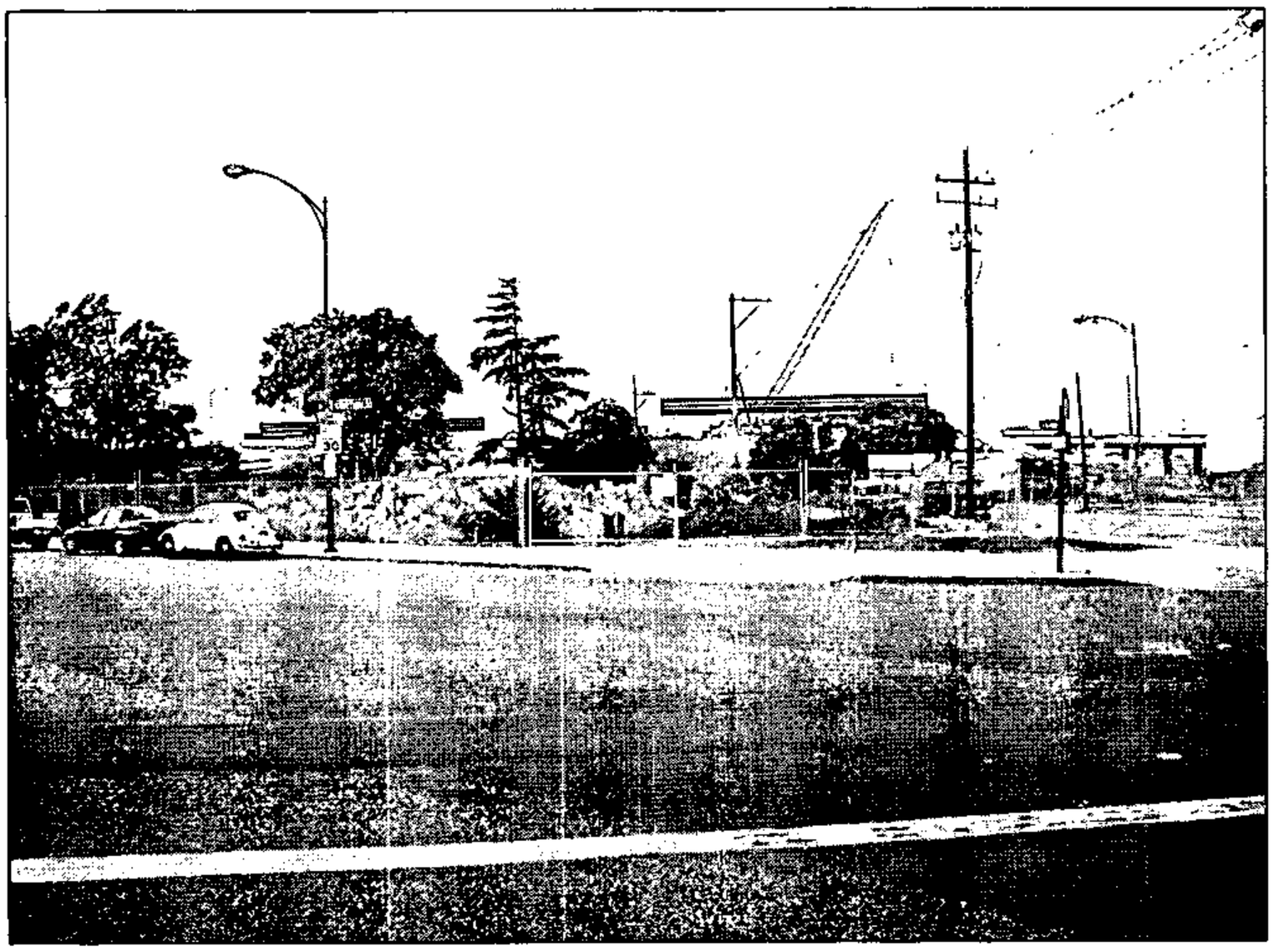

Figure V.F-2: View of Distant Office Buildings, Looking Southwest

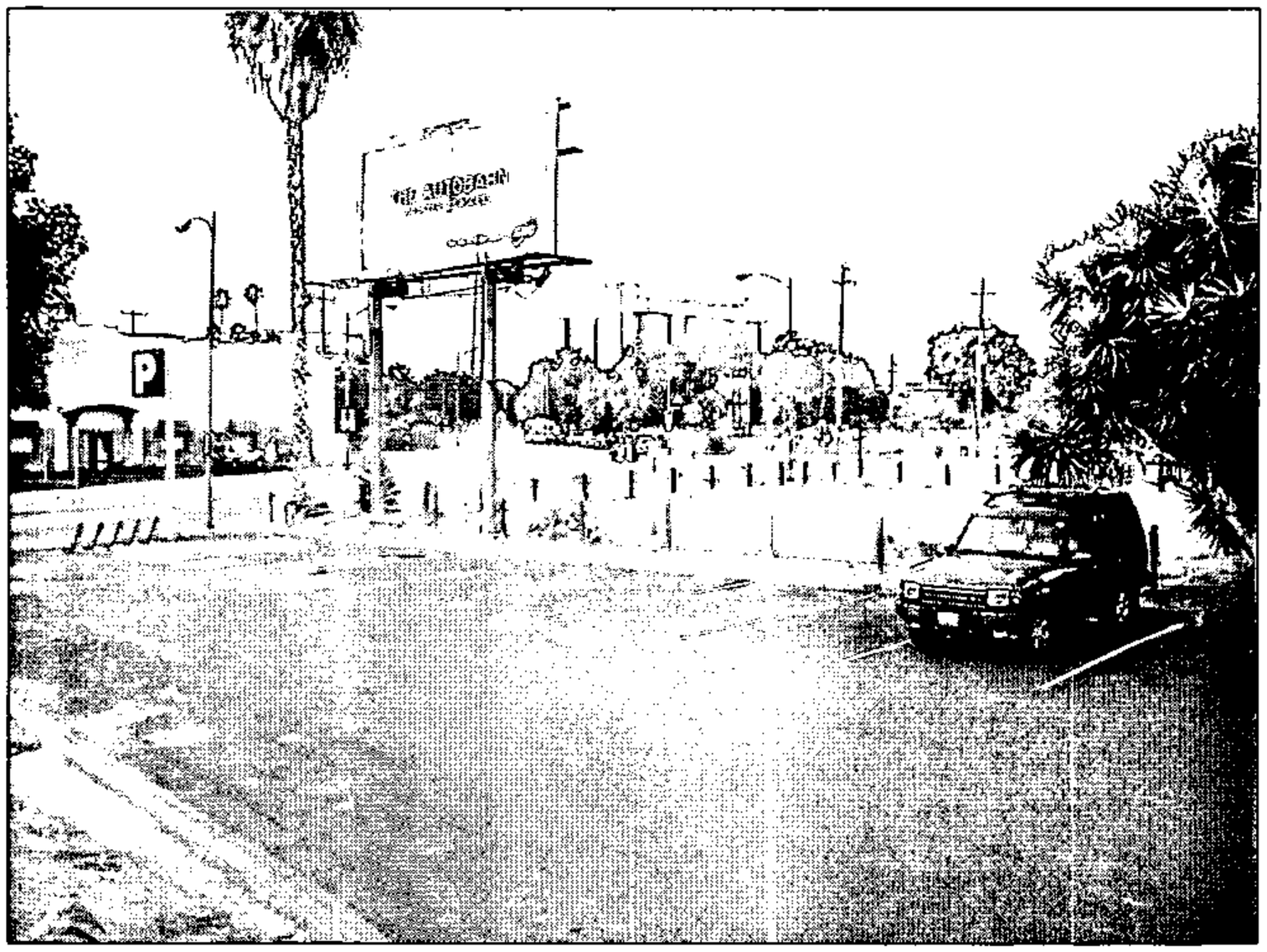

Figure V.F-3: View Across Site, Looking Southwest from Coleman Street

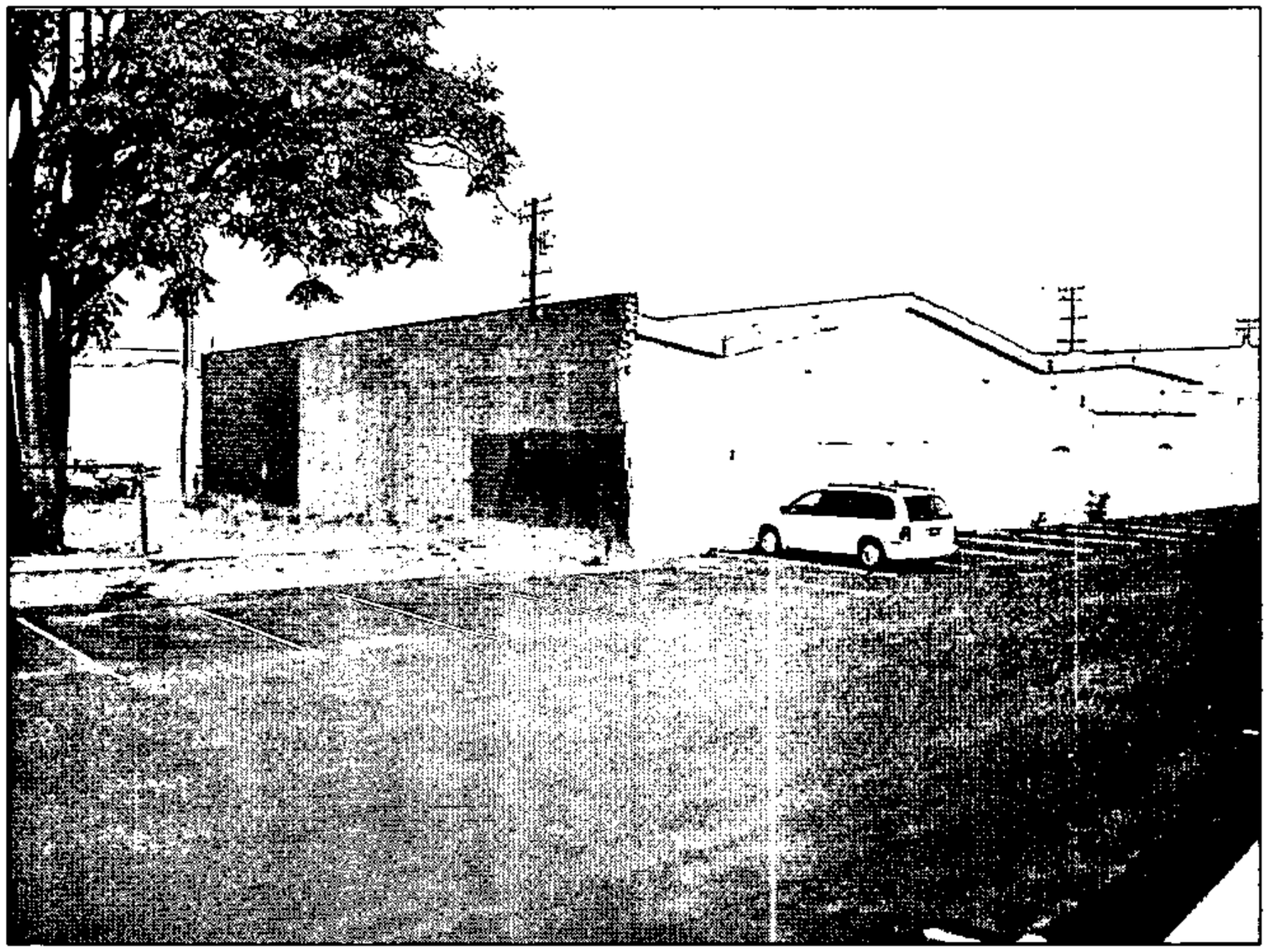

Figure V.F-4: View of Industrial Building, Northern Edge of Site

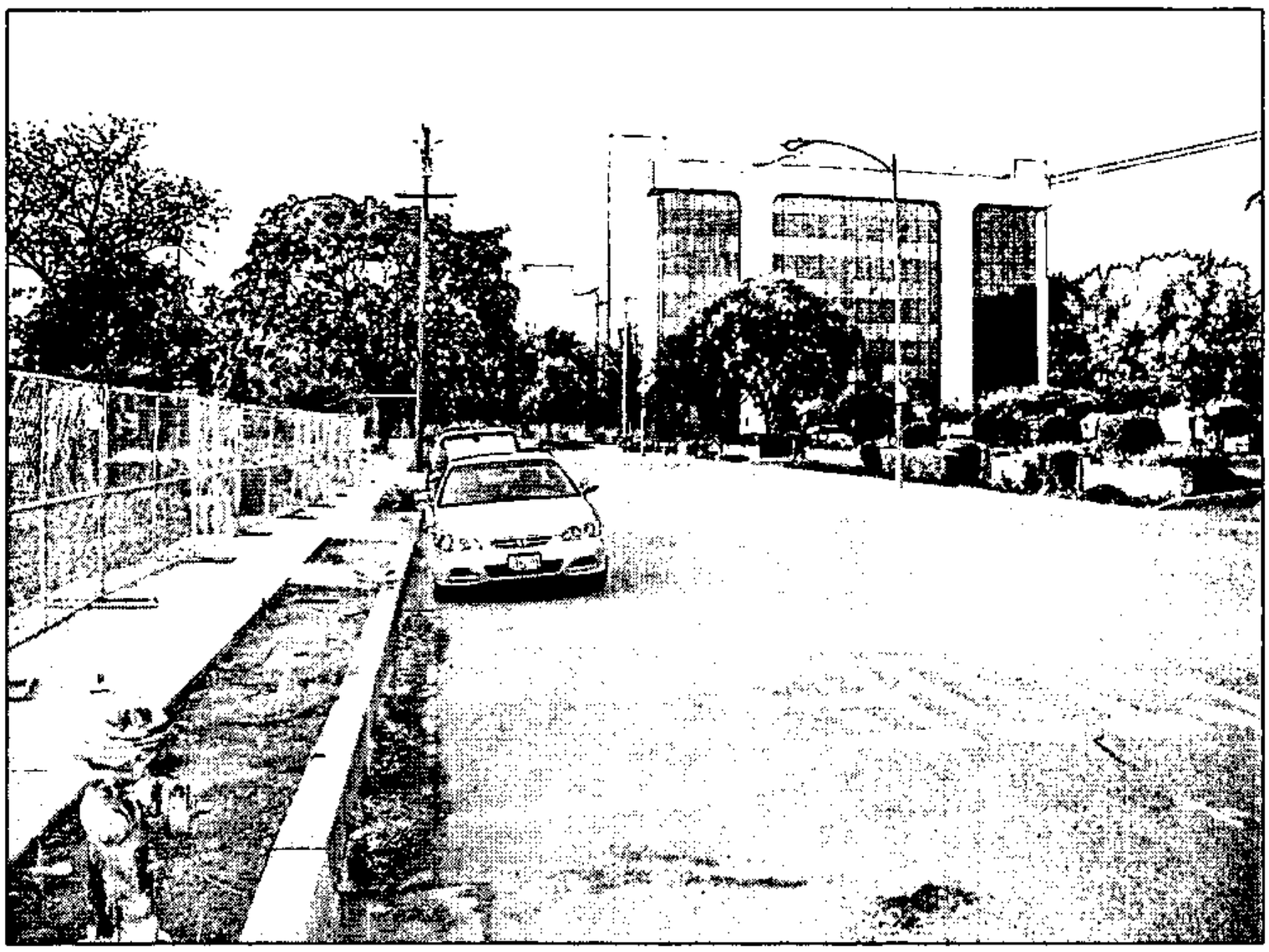

Figure V.F-5: View of Terraine Street, Looking South

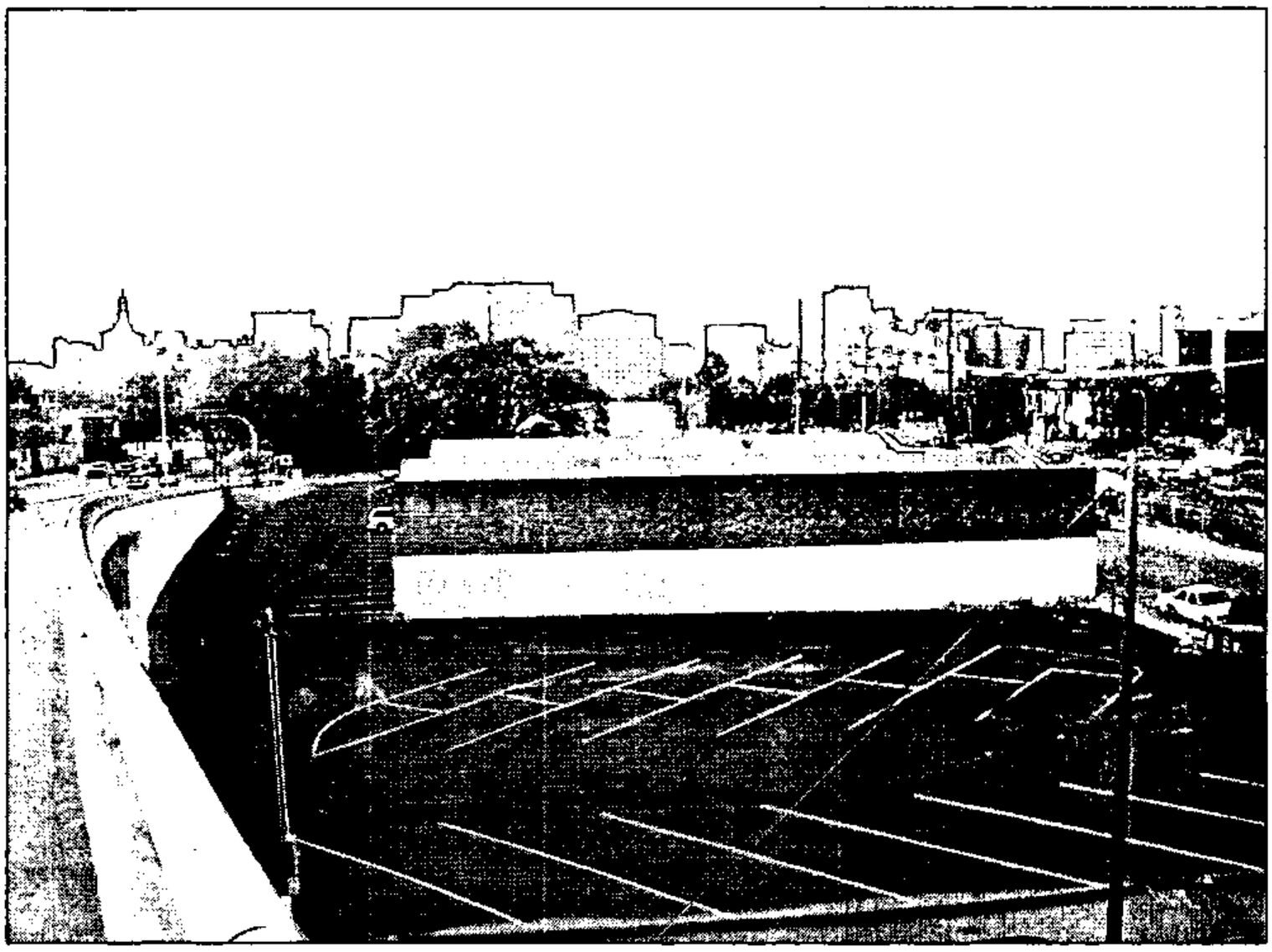

Figure V.F-6: View Across Site Toward Downtown Core from Coleman Overpass

c. Project Site Visibility. The project site is visible from several public viewing areas located principally in the general vicinity. In addition, portions of the site are potentially visible from adjacent multi-story buildings or more distant locations. However, the built up urban setting surrounding the proposed project site limits views of the site from many of these locations. Unobstructed views of the entire site are generally only possible from elevated view points.

d. Potentially Affected Public View Corridors and Viewpoints. A pair of vantage points with views of the Project site are described in the text which follows.

(1) Guadalupe Freeway (SR87). This freeway extends along the project site's entire western boundary. The elevated construction of this freeway allows a continuous view of the project site when not impaired by the Davidson Building (ABC News) or intervening vegetation.

(2) North Market Street/Coleman Avenue Overpass. This roadway gradually gains elevation as it heads north and west from the intersection of Market and Julian Streets until it crosses the UPRR tracks as an overpass. Vehicles traveling southeast toward the vicinity of the site are provided with a clear view of much of the site, hindered only by a short wall on the overpass and the pedestrian railing (see the foreground in Figure V.G-6).

e. San Jose 2020 General Plan Policies. The City of San Jose *General Plan* provides policies which address aesthetic quality related to both the natural and the built environment. The *Plan* aims to retain and encourage diversity and individual expression in the built environment, while encouraging quality new construction. Policies relevant to the proposed Project include:

- Community Development: Urban Design Policy 1: The City should continue to apply strong architecture and site design controls on all types of development for the protection and development of neighborhood character, and for the proper transition between areas with different types of land uses.
- Community Development: Urban Design Policy 2: Private development should include adequate landscaped areas.
- Community Development: Urban Design Policy 6: Proposed structures adjacent to existing residential areas should be architecturally designed and sited to protect the privacy of existing residences.
- Community Development: Urban Design Policy 8: Design solutions should be considered in the development review process which addresses security, aesthetics, and public safety.
- Community Development: Urban Design Policy 24: New development projects should include the preservation of ordinance-sized and other significant trees. Any adverse affect on the health and longevity of such trees should be avoided through appropriate design measures and construction practices. When tree preservation is not feasible, the project should include appropriate tree replacement.

f. City Public Art Policy. The City of San Jose and Redevelopment Agency also has a set of policies and procedures for art in public places (San Jose Code, §22.08) for certain capital projects. These policies aim to ensure that:

> "...no less than two percent of the cost of certain municipal capital improvement projects fund in whole or in part by either the City of San Jose or the Redevelopment Agency or both is set aside for the acquisition of works of art to be displayed in or about public places with the City."

2. Impacts and Mitigation Measures

The following section discusses potential impacts related to the visual and aesthetic qualities that could result from the implementation of the proposed project. The section begins with the criteria of significance, establishing the thresholds to determine whether an impact is significant. The latter part of this section presents the impacts and mitigation measures, if required.

a. Significance Criteria and Impact Methodology. Implementation of the proposed project would have significant impacts on visual and aesthetic quality if they would:

- Have a substantial adverse effect on a scenic vista;
- Substantially degrade the existing visual character or quality of the site and its surroundings;
- Substantially damage a scenic resource, including but not limited to trees and historic buildings;
- Substantially degrade the existing visual character or quality of an area, or result in the substantial disruption or blocking of existing views or public opportunities to view scenic resources;
- Result in visual resource conditions that would conflict with applicable City of San Jose policies and regulations relating to aesthetics; or
- Introduce new development which will substantially detract from the integrity, character, and/or aesthetic environment of a neighborhood.

b. Less-than-Significant Aesthetic Impacts. As described above, the site and its vicinity offer predominantly urban views of other urban scenes. No scenic vistas from the site would be affected by the proposed project, nor would development at this location block scenic vistas from other public locations. Because the site itself suffers from blight and the surrounding area is composed of a decidedly mixed architectural and scenic character, the proposed development would not degrade the existing visual character of the area; it would almost surely improve it. Designed as a cohesive neighborhood of well proportioned, taller and lower structures with carefully sited private and public open spaces, the project can be an aesthetic benefit to its surroundings. While the project would involve the removal of up to 22 ordinance-size trees (see Chapter V.G for a detailed discussion), none of those trees on the site are native species or particularly fine specimens; many are visually prominent, but the proposed project would include the planting of new street trees and other landscaping. No historic buildings would be removed from the site. Continued implementation of the City's *2020 General Plan* policies with regard to site planning, urban design, and landscaping would help ensure that no significant adverse aesthetic impacts would result from the project.

Consistency of the project with the City's art in public places policies cannot yet be evaluated as no specific project design or landscaping plan has been proposed. These policies would be implemented as part of the City's standard development review process, once a specific project is proposed.

c. Potentially Significant Aesthetic Impacts and Mitigation Measures. No significant adverse impacts related to aesthetic or visual resources would result from the proposed project.

G. VEGETATION AND WILDLIFE

This section describes the vegetation and urban wildlife within the project site and evaluates the impacts that would result from the implementation of the proposed project. Mitigation measures are recommended, where appropriate.

1. Existing Setting

The following section discusses the existing vegetation and urban wildlife within the project site. The discussion includes the following topics: biotic resources; special-status plant and animal species; and ordinance-size trees.

a. Biotic Resources on the Project Site. Developed habitat occupies the entire project area (approximately 12.4 acres). Buildings and pavement cover most of the developed habitat on the site. Minimal landscaping is present adjacent to buildings and parking lots. Planted tree species include Tree of Heaven, and Mexican fan palm.

The developed, landscaped habitat within the project site supports wildlife species typically associated with urban areas. Wildlife observed or expected to occur include: mourning dove (*Zenaida macroura*), Brewer's blackbird (*Euphagus cyanocephalus*), American crow (*Corvus brachyrhnchos*), European starling (*Sturnus vulgaris*), house sparrow (*Passer domesticus*), American robin (*Turdus migratorius*), Western fence lizard (*Sceloporous occidentaliz*), and house mouse (*Mus musculus*).

b. Special-Status Plant and Animal Species. Special status plants and animals are those species listed under the State and Federal Endangered Species Acts, plants listed by the California Native Plant Society's Inventory of Rare and Endangered Vascular Plants of California, and animals designated as Species of Special Concern by the California Department of Fish and Game.

(1) Special Status Plant Species. Special-status plant species reported in the San Jose area are found in natural communities associated with serpentine grasslands and valley foothill grasslands. These natural communities are not found on the project site. No special status plans or potentially suitable habitat for these species were observed on the developed project site.

(2) Special-Status Animal Species. Several special-status animals have been identified as historically or currently occurring in the vicinity of the project area. Most of special-status animal species occurring in the South Bay Area breed and forage in habitat types that are not present within or immediately adjacent to the project site. Habitats absent from the site include freshwater marsh, freshwater ponds with emergent vegetation, salt marsh, riparian, and serpentine soils. The project site does not provide suitable habitat for vernal pool tadpole shrimp, California red-legged frog, California tiger salamander, or the California clapper rail. No Burrowing Owls, nor evidence of occupation have been observed within the project area. In addition, no ground squirrel burrows or other suitable habitat for the Burrowing Owl were present.

c. Ordinance-Size Trees. The City of San Jose Tree Removal Controls Ordinance (San Jose Civil Code, Sections 13.31.010 to 13.32.100) is intended to protect all trees having a trunk that measures 56 inches or more in circumference (18 inches in diameter) at the height of 24 inches above the

natural grade of slope. The ordinance protects both native and non-native species. A permit is required from the City of San Jose for the removal of ordinance-size trees.

A tree survey was conducted to determine the number, species, size, and location of trees on the site (see Figure V.G-1, Tree Location Map).[1] Approximately 104 mature ornamental trees are scattered throughout the project area as shown in Table V.G-1, including Tree of Heaven, Mexican fan palm, and white birch. Depending on their location on the site, and recent care, the trees range from excellent to poor in condition. There are approximately 22 ordinance-sized trees located within the project area.

2. Vegetation and Wildlife Impacts

a. Criteria of Significance. Implementation of the Brandenburg Mixed Use Project would have significant impacts on vegetation and wildlife if it would have either of the following effects:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, regulations or by the California Department of Fish and Game (CDFG) or US Fish and Wildlife Service (USFWS); or
- Conflict with the provisions of approved local, regional, or State policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

b. Impacts and Mitigation Measures. This section outlines potential impacts to vegetation and wildlife. Less-than-significant impacts are addressed first, followed by significant impacts.

(1) Less-than-Significant Impacts. Implementation of the proposed project would directly impact the vegetation and urban wildlife on the project site. Existing development and landscaping would be replaced with new structures, paved areas, and new landscaping. Most of the sensitive plants and wildlife species occurring in the San Francisco Bay Area such as the Burrowing Owl, long-horn fairy shrimp, vernal pool tadpole shrimp, vernal pool fairy shrimp, Bay checkerspot butterfly, steelhead rainbow trout, California red-legged frog, tiger salamander, foothill yellow-legged frog, and Bald Eagle are found in habitat types that do not occur on the project site. No suitable habitat exists for these sensitive animal species and the project site is outside the known distribution of them. Thus, these species are not expected to occur on the project site and would thus not be affected by the implementation of the proposed project. Species currently adapted to urban habitats, such as the Mourning Dove, Starling, and American Robin would likely continue to use the project site. Impacts to the urban habitat by the proposed development of residential uses on the site would not result in a significant impact, since the existing habitat is not considered sensitive.

(2) Significant Vegetation and Wildlife Impacts. The following significant impact would result from the proposed project.

<u>Impact VEG-1</u>: Construction of the proposed project would result in the removal of existing mature trees. (S)

[1] David J. Powers & Associates, Inc., on February 16, 2001.

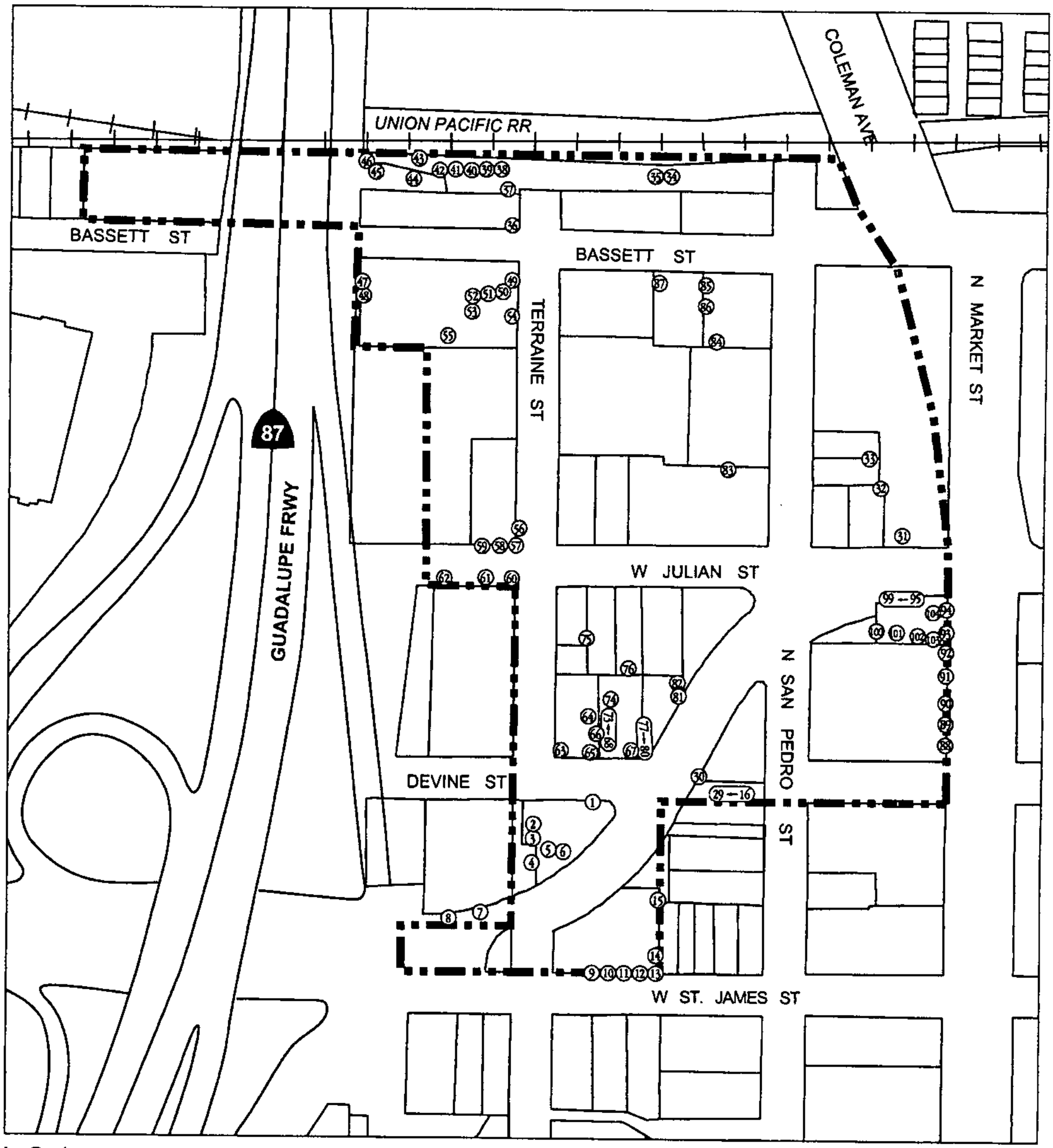

FIGURE V.G-1

Brandenburg Mixed Use Project/
North San Pedro Housing Sites
Tree Location Map

SOURCE: DAVID J. POWERS AND ASSOCIATES, INC., 2001, SUPPLEMENTED BY LSA ASSOCIATES, INC., 2003.

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Table V.G-1: Summary of Trees Within the Project Area

Tree Number	Common Name	Scientific Name	Circumference (Inches)
1	Tree of Heaven*	*Ailanthus altissima*	72
2	Unknown	*Unknown*	27
3	Unknown	*Unknown*	38
4	White Birch	*Betula pendula*	16-21
5	White Birch	*Betula pendula*	23-25
6	White Birch	*Betula pendula*	17-28
7	London Plane	*Plantinus acerifolia*	43
8	London Plane	*Plantinus acerifolia*	45
9	Mexican Fan Palm*	*Washingtonia robusta*	68
10	Mexican Fan Palm*	*Washingtonia robusta*	75
11	Mexican Fan Palm*	*Washingtonia robusta*	72
12	Mexican Fan Palm*	*Washingtonia robusta*	70
13	Mexican Fan Palm*	*Washingtonia robusta*	69
14	Mexican Blue Palm*	*Brahea armata*	94
15	Mexican Blue Palm*	*Brahea armata*	68
16	Liquidambar	*Liquidambar styraciflua*	41
17	Tree of Heaven	*Ailanthus altissima*	12
18	Tree of Heaven	*Ailanthus altissima*	12-17
19	Tree of Heaven	*Ailanthus altissima*	9-15
20	Tree of Heaven	*Ailanthus altissima*	8-11
21	Tree of Heaven	*Ailanthus altissima*	9-12
22	Flowering Cherry	*Prunus spp.*	12
23	Liquidambar	*Liquidambar styraciflua*	32
24	Tree of Heaven	*Ailanthus altissima*	9
25	Tree of Heaven	*Ailanthus altissima*	10-12
26	Tree of Heaven	*Ailanthus altissima*	3-13
27	Tree of Heaven	*Ailanthus altissima*	3-13
28	Tree of Heaven	*Ailanthus altissima*	3-16
29	Tree of Heaven	*Ailanthus altissima*	7-13
30	Liquidambar	*Liquidambar styraciflua*	32
31	Mexican Fan Palm*	*Washingtonia robusta*	79
32	Spanish Bayonette*	*Yucca aloifolia*	162
33	Tree of Heaven*	*Ailanthus altissima*	165
34	Tree of Heaven	*Ailanthus altissima*	35
35	Tree of Heaven	*Ailanthus altissima*	25
36	Tree of Heaven	*Ailanthus altissima*	15-18
37	Tree of Heaven	*Ailanthus altissima*	18
38	Tree of Heaven	*Ailanthus altissima*	19-30
39	Tree of Heaven	*Ailanthus altissima*	5-12
40	Tree of Heaven	*Ailanthus altissima*	5-45
41	Tree of Heaven	*Ailanthus altissima*	5-42
42	Tree of Heaven	*Ailanthus altissima*	10-15
43	Tree of Heaven	*Ailanthus altissima*	6-11
44	Tree of Heaven	*Ailanthus altissima*	7-12

Note: * Ordinance-sized trees 56+ inches in circumference (18+ inches diameter).

Table IV.G-1 *continued*

Tree Number	Common Name	Scientific Name	Circumference (Inches)
45	Tree of Heaven	*Ailanthus altissima*	7-45
46	Tree of Heaven	*Ailanthus altissima*	18,19
47	Tree of Heaven	*Ailanthus altissima*	15-20
48	Tree of Heaven	*Ailanthus altissima*	15-30
49	Tree of Heaven	*Ailanthus altissima*	20
50	Tree of Heaven	*Ailanthus altissima*	20
51	Unknown	*Leguminosae*	5-15
52	Unknown	*Leguminosae*	5-10
53	Tree of Heaven	*Ailanthus altissima*	10
54	Lombardi Poplar	*Populus nigra*	5-35
55	Tree of Heaven	*Ailanthus altissima*	10-25
56	Tree of Heaven	*Ailanthus altissima*	7-37
57	Tree of Heaven	*Ailanthus altissima*	17-53
58	Tree of Heaven	*Ailanthus altissima*	6-17
59	Tree of Heaven	*Ailanthus altissima*	3-12
60	Tree of Heaven	*Ailanthus altissima*	32-38
61	Mexican Fan Palm*	*Washingtonia robusta*	82
62	Mexican Fan Palm*	*Washingtonia robusta*	72
63	Tree of Heaven*	*Ailanthus altissima*	104
64	Magnolia*	*Magnolia grandiflora*	130
65	Unknown	*Prunus spp.*	44
66	Glossy Privet	*Ligustrum lucidum*	19
67	Podocarpus	*Podocarpus spp.*	38
68	Podocarpus	*Podocarpus spp*	26
69	Podocarpus	*Podocarpus spp*	26
70	Podocarpus	*Podocarpus spp*	21
71	Podocarpus	*Podocarpus spp*	20
72	Podocarpus	*Podocarpus spp*	25
73	Podocarpus	*Podocarpus spp*	26
74	Unknown	*Prunus spp.*	35
75	Tree of Heaven	*Ailantjhus altissima*	15-25
76	Tree of Heaven	*Ailantjhus altissima*	66
77	Podocarpus	*Podocarpus spp.*	7-14
78	Camphor	*Cinnamomum camphora*	42
79	Camphor	*Cinnamomum camphora*	42
80	Camphor	*Cinnamomum camphora*	50
81	Tree of Heaven	*Ailantjhus altissima*	25
82	Tree of Heaven	*Ailantjhus altissima*	39,58
83	Tree of Heaven	*Ailantjhus altissima*	25
84	Tree of Heaven	*Ailantjhus altissima*	66
85	Tree of Heaven	*Ailantjhus altissima*	30

Note: * Ordinance-sized trees 56+ inches in circumference (18+ inches diameter).

Table IV.G-1 *continued*

Tree Number	Common Name	Scientific Name	Circumference (Inches)
86	Tree of Heaven	*Ailantjhus altissima*	15-30
87	Tree of Heaven	*Ailantjhus altissima*	15-25
88	Lombardi Poplar*	*Populus nigra*	63
89	Lombardi Poplar	*Populus nigra*	28
90	Lombardi Poplar	*Populus nigra*	31
91	Lombardi Poplar	*Populus nigra*	20
92	Lombardi Poplar	*Populus nigra*	25
93	Lombardi Poplar*	*Populus nigra*	57
94	Lombardi Poplar	*Populus nigra*	51
95	Victorian box	*Pittosporum undulatum*	34
96	Liquidambar	*Liquidambar styraciflua*	30
97	Liquidambar	*Liquidambar styraciflua*	31
98	Liquidambar	*Liquidambar styraciflua*	41
99	Unknown*	*Unknown*	82
100	Unknown*	*Unknown*	78
101	Victorian box	*Pittosporum undulatum*	24
102	Fern Pine	*Podocarpus gracilior*	22
103	Fern Pine	*Podocarpus gracilior*	28
104	Crape Myrtle	*Lagerstroemia indicia*	24

Note: * Ordinance-sized trees 56+ inches in circumference (18+ inches diameter).

Source: David J. Powers & Associates, February 16, 2001, supplemented by LSA Associates, Inc., April 28, 2003.

Based upon the tree surveys completed in February 2001 and April 2003, approximately 104 trees, including 22 ordinance-sized trees could be removed during redevelopment of the property with urban uses. The loss of the 22 ordinance-sized trees is considered significant. While none of the trees are native or are particularly fine specimens, the City does require mitigation to off-set the loss of the 22 ordinance-sized trees.

Mitigation Measure VEG-1: For trees that cannot be incorporated into new landscaping, a City of San Jose Tree Removal Permit shall be obtained prior to removal of trees from the site. Loss of ordinance size trees will be mitigated by implementation of landscaping plans approved by the City of San Jose, in conformance with the City of San Jose landscaping guidelines and City of San Jose Planning Department specifications. The City of San Jose requires tree replacement for those trees greater than 18 inches in diameter at a ratio of 4:1 (trees planted to trees removed). (LTS)

H. GEOLOGY

This section assesses the project site's geologic environment based on the inspection of current site conditions, published and unpublished geologic reports and maps, and a site-specific preliminary geotechnical report (for the West Julian Revitalization project).[1] (Appendix D provides this report.) This section also assesses potential impacts from strong ground shaking, liquefaction, and differential settlement that could result from seismic activity.

1. Setting

The project site is located at the western coastal margin of the Coast Range Geomorphic Province of Northern California. This region is dominated by northwest-southeast trending ranges of low mountains and intervening valleys. The site location is within the San Andreas Fault Zone, an area of active seismicity.

a. Geologic Setting.

(1) Topography. The project site is located within a relatively flat urbanized area. The ground surface elevation ranges from approximately 75 to 83 feet above mean sea level. No open creek or stream channels cross the site.

(2) Geology and Soils. The project site is underlain by Quaternary-aged sand, gravel, silt and mud.[2] A preliminary geotechnical investigation conducted at a portion of the project site in 2000 included the completion of six cone penetration tests (CPT) to a maximum depth of 80 feet below the ground surface.[3] The CPT results confirmed the presence of interbedded layers of unconsolidated clay, silt, sand to the maximum depth explored. The upper seven to 15 feet of unconsolidated sediments are identified as non-uniformly compacted heterogeneous fill in the preliminary geotechnical report. The fill materials would be expected to experience settlements of up to 2 inches under a new building load.

b. Seismic Conditions. The project site is located near the San Andreas Fault Zone (SAFZ), a complex of active faults forming the boundary between the North American and Pacific lithospheric plates. Movement of the plates relative to one another results in the accumulation of strain along the faults, which is released during earthquakes. Numerous moderate to strong historic earthquakes have been generated in northern California by the SAFZ. The level of active seismicity results in classification of the area of seismic risk Zone 4 (the highest risk category) in the California Building Code.

The SAFZ includes numerous active faults found by the California Division of Mines and Geology under the Alquist-Priolo Earthquake Faults Act to be "active" (i.e., to have evidence of fault rupture in the last 11,000 years). Regional active faults are shown on Figure V.H-1.

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[1] Treadwell and Rollo, 2001, *Geotechnical Investigation, North Market and West Julian Site, San Jose, California*, prepared for the Legacy Partners, 5 February.

[2] Wentwoth, C.M., 1997, Geologic Materials of the San Francisco Bay Region, United States Geologic Survey (USGS) Open File Report 97-744.

[3] Treadwell and Rollo, 2001, op.cit.

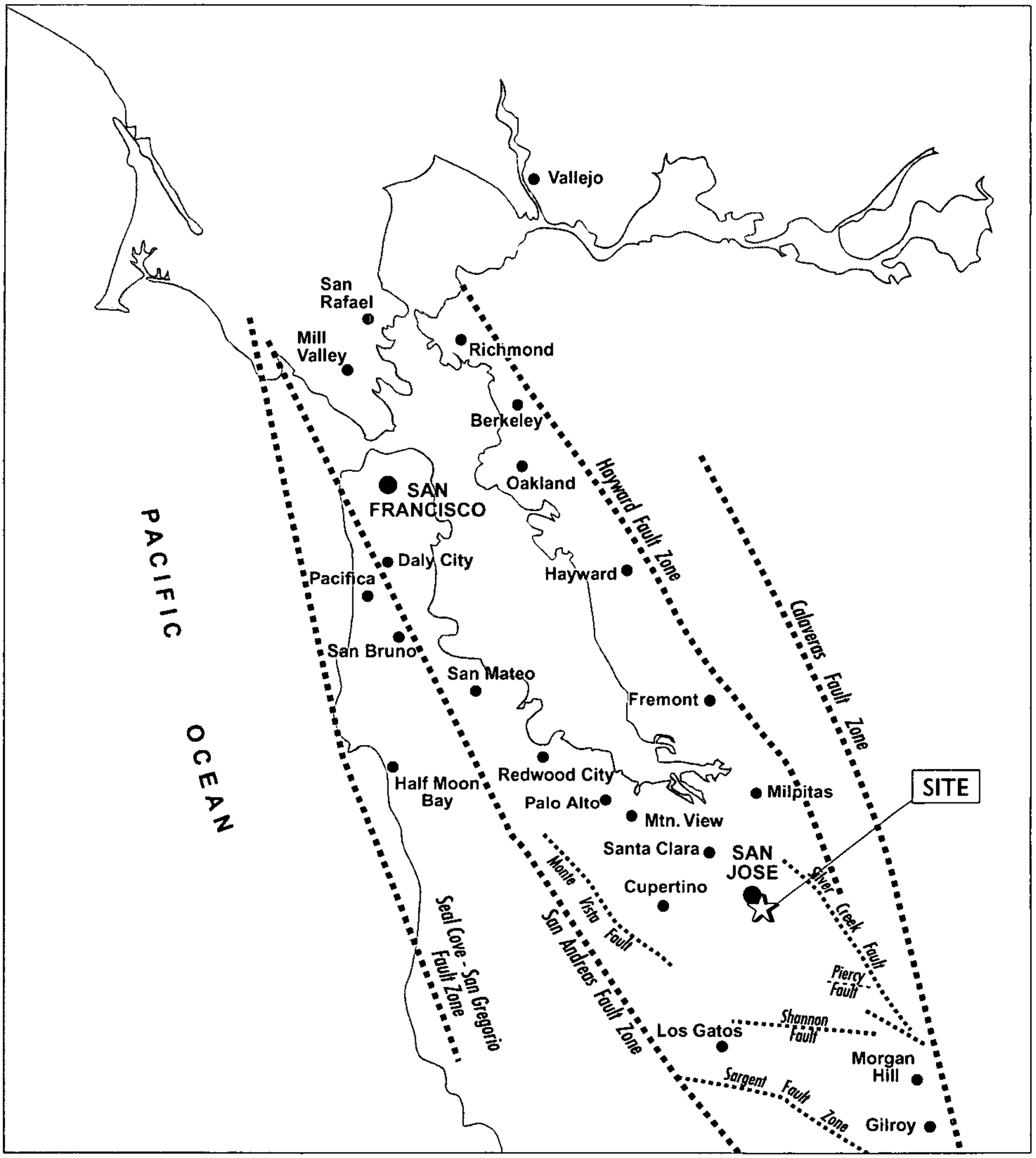

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FIGURE V.H-1

Brandenburg Mixed Use Project/
North San Pedro Housing Sites
Regional Active Earthquake Faults

SOURCE: CALIFORNIA DIVISION OF MINING & GEOLOGY; LSA ASSOCIATES, INC., 2003

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The Working Group on California Earthquake Probabilities has determined that there is a 70 percent chance (±10 percent) of at least one magnitude 6.7 or greater earthquake striking the San Francisco Bay region between 2000 and 2030.[4] However, this probability should be regarded as the minimum estimate for such activity overall, as large earthquakes are also possible on fault zones (e.g., Calaveras, Seal Cove-San Gregorio-Hosgri, and Greenville) that were not included in this regional investigation.

(1) Surface Rupture. Surface rupture occurs when the ground surface is broken due to fault movement during an earthquake. The location of surface rupture generally can be assumed to be along an active or potentially active major fault trace. No active faults have been mapped at the project site. Therefore, potential for fault rupture at the site is negligible, and no portion of the site is located within an Alquist-Priolo Special Study Zone.

The closest active fault to the project site is the Hayward fault zone, located approximately 5.6 miles to the northeast. Other potentially damaging faults are located within ten miles of the project site, including the Monte Vista-Shannon and Calaveras faults.

(2) Ground Shaking. Ground shaking is a general term referring to all aspects of motion of the earth's surface resulting from an earthquake, and is normally the major cause of damage in seismic events. The extent of ground shaking is controlled by the magnitude and intensity of the earthquake, distance from the epicenter, and local geologic conditions. Magnitude is a measure of the energy released by an earthquake; it is assessed by seismographs that measure the amplitude of seismic waves. In the past, the common standard for measurement of magnitude (M_L) by geologists and seismologists was the Richter Scale. However, due to limitations of the instrumentation used to measure Richter magnitude, scientists now use moment magnitude (M_W) to characterize seismic events.

Intensity is a more subjective measure of the perceptible effects of seismic energy at a given point and varies with distance from the epicenter and local geologic conditions. The Modified Mercalli Intensity Scale (MMI) (Table V.H-1) is the most commonly used scale for measurement of the subjective effects of earthquake intensity. Intensity can also be quantitatively measured using accelerometers (strong motion seismographs) that record ground acceleration at a specific location, a measure of force applied to a structure under seismic shaking. Acceleration is measured as a fraction or percentage of the acceleration under gravity (g). The southern Hayward fault is considered capable of generating a moment magnitude (M_W) 7.1 maximum earthquake.[5] An earthquake of this magnitude on the Hayward fault would generate very strong seismic shaking (MMI VIII) at the project site.

Estimates of the peak ground acceleration have been made for the project area based on probabilistic models that account for multiple seismic sources. Under these models, consideration of the probability of expected seismic events is incorporated into the determination of the level of ground shaking at a particular location. The expected peak horizontal acceleration (with a 10 percent chance of being exceeded in the next 50 years) generated by any of the seismic sources potentially affecting the area,

[4] United State Geologic Survey, 2003, website: http://geopubs.wr.usgs.gov/fact-sheet/fs152-99/.

[5] U.S. Geological Survey, Earthquake Hazards Program, online (http://geohazards.cr.usgs.gov/eq/faults/fsrpage04.html) information on California Fault Parameters.

Table V.H-1: Modified Mercalli Scale[a]

	Intensity	Effects	v,[b] cm/s	g[c]
M[d]	I.	Not felt. Marginal and long-period effects of large earthquakes.		
3	II.	Felt by persons at rest, on upper floors, or favorably placed.		
	III.	Felt indoors. Hanging objects swing. Vibration like passing of light trucks. Duration estimated. May not be recognized as an earthquake.		0.0035-0.007
4	IV.	Hanging objects swing. Vibration like passing of heavy trucks; or sensation of a jolt like a heavy ball striking the walls. Standing motor cars rock. Windows, dishes, doors rattle. Glasses clink. Crockery clashes. In the upper range of IV wooden walls and frame creak.		0.007-0.015
	V.	Felt outdoors; direction estimated. Sleepers wakened. Liquids disturbed, some spilled. Small unstable objects displaced or upset. Doors swing, close, open. Shutters, pictures move. Pendulum clocks stop, start, change rate.	1-3	0.015-0.035
5	VI.	Felt by all. Many frightened and run outdoors. Persons walk unsteadily. Windows, dishes, glassware broken. Knickknacks, books, etc., off shelves. Pictures off walls. Furniture moved or overturned. Weak plaster and masonry D cracked. Small bells ring (church, school). Trees, bushes shaken (visibly, or heard to rustle - CFR).	3-7	0.035-0.07
6	VII.	Difficult to stand. Noticed by drivers of motor cars. Hanging objects quiver. Furniture broken. Damage to masonry D, including cracks. Weak chimneys broken at roof line. Fall of plaster, loose bricks, stones, tiles, cornices (also unbraced parapets and architectural ornaments - CFR). Some cracks in masonry C. Waves on ponds; water turbid with mud. Small slides and caving in along sand or gravel banks. Large bells ring. Concrete irrigation ditches damaged.	7-20	0.07-0.15
	VIII.	Steering of motor cars affected. Damage to masonry C; partial collapse. Some damage to masonry B; none to masonry A. Fall of stucco and some masonry walls Twisting, fall of chimneys, factory stacks, monuments, towers, elevated tanks. Frame houses moved on foundations if not bolted down; loose panel walls thrown out. Decayed piling broken off. Branches broken from trees. Changes in flow or temperature of springs and wells. Cracks in wet ground and on steep slopes.	20-60	0.15-0.35
7	IX.	General panic. Masonry D destroyed; masonry C heavily damaged, sometimes with complete collapse; masonry B seriously damaged. (General damage to foundations - CFR.) Frame structures, if not bolted, shifted off foundations. Frames racked. Serious damage to reservoirs. Underground pipes broken. Conspicuous cracks in ground. In alluviated areas sand and mud ejected, earthquake foundations, sand craters.	60-200	0.35-0.7
8	X.	Most masonry and frame structures destroyed with their foundations. some well-built wooden structures and bridges destroyed. Serious damage to dams, dikes, embankments. Large landslides. Water thrown on banks of canals, rivers, lakes, etc. Sand and mud shifted horizontally on beaches and flat land. Rails bent slightly.	200-500	0.7-1.2
	XI.	Rails bent greatly. Underground pipelines completely out of service.		>1.2
	XII.	Damage nearly total. Large rock masses displaced. Lines of sight and level distorted. Objects thrown into the air.		

[a] From Richter (1958).
[b] Average peak ground velocity, centimers per second (cm/s).
[c] Average peak acceleration (away from source).
[d] Richter magnitude correlation.

Note: *Masonry A, B, C, D.* To avoid ambiguity of language, the quality of masonry, brick or otherwise, is specified by the following lettering (which has no connection with the conventional Class A, B, C construction).

- *Masonry A:* Good workmanship, mortar, and design, reinforced, especially laterally, and bound together by using steel, concrete, etc; designed to resist lateral forces.
- *Masonry B:* Good workmanship and mortar, reinforced, but not designed to resist lateral forces.
- *Masonry C:* Ordinary workmanship and mortar; no extreme weaknesses such as non-tied-in corners, but masonry is neither reinforced nor designed against horizontal forces.
- *Masonry D:* Weak materials, such as adobe; poor mortar; low standards of workmanship; weak horizontally.

including the project site, is estimated by the California Division of Mines and Geology as greater than 0.5 to 0.6g.[6] This level of ground shaking at the project site is a potentially serious hazard.

(3) Liquefaction. Liquefaction is the temporary transformation of loose, saturated granular sediments from a solid state to a liquefied state as a result of seismic ground shaking. In the process, the soil undergoes transient loss of strength, which commonly causes ground displacement or ground failure to occur. Since saturated soils are a necessary condition for liquefaction, soil layers in areas where the groundwater table is near the surface have higher liquefaction potential than those in which the water table is deep. The depth to groundwater at the project site varies between approximately 15 and 22 feet below the ground surface.[7] The preliminary geotechnical report indicates that most of the unconsolidated sediments underlying the site are not susceptible to liquefaction. However, several discontinuous 1- to 3-foot thick layers of saturated medium dense sand and silty sand and a 5-foot thick layer of medium dense silty sand identified in the CPT logs may be susceptible to liquefaction and could cause settlements at the surface of up to 1 inch.[8]

(4) Slope Stability. The project site is relatively level and would not be expected to be susceptible to slope instability hazards.

(5) Differential Settlement. Subsidence and differential settlement could occur if buildings are built on low strength foundation materials (including the imported fill). Pilings are often used to anchor structures to firmer deposits below the surface in these situations. Although differential settlement generally occurs slowly enough that its effects are not serious, building damage can occur. Any areas of the site that contain uncontrolled (non-engineered) fill may be susceptible to settlement.

c. San Jose 2020 General Plan Policies. Seven key General Plan policies specifically address soils and geology or hazards.

- Soils and Geologic Conditions Policy 1: The City should require soils and geologic review of development proposals to assess such hazards as potential seismic hazards, surface ruptures, liquefaction, land-sliding, mud-sliding, erosion, and sedimentation in order to determine if these hazards can be adequately mitigated.
- Soils and Geologic Conditions Policy 6: Development in areas subject to soils and geologic hazards should incorporate adequate mitigation measures.
- Soils and Geologic Conditions Policy 8: Development proposed within areas of potential geological hazards should not be endangered by, nor contribute to, the hazardous conditions on the site or on adjoining properties.
- Soils and Geologic Conditions Policy 9: Residential development proposed on property formerly used for agricultural or heavy industrial uses should incorporate adequate mitigation/remediation for soils contamination as recommended through the Development Review process.
- Earthquake Policy 1: The City should require that all new buildings be designed and constructed to resist stresses produced by earthquakes.

[6] California Geological Survey, 2003, Probabilistic Seismic Hazards, San Jose 1 x 2 Degree Sheet.

[7] Treadwell and Rollo, 2001, op.cit.

[8] Treadwell and Rollo, 2001, op.cit.

- Earthquake Policy 4: The location of public utilities and facilities, in areas where seismic activity could produce liquefaction should only be allowed if adequate mitigation measures can be incorporated into the project.
- Hazards Policy 1: Development should only be permitted in those areas where potential danger to the health, safety, and welfare of the residents of the community can be mitigated to an acceptable level.

2. Impacts and Mitigation Measures

This section outlines potential impacts related to geology, soils and seismicity and recommends mitigation measures. Less-than-significant impacts are described first, followed by significant impacts.

a. Criteria of Significance. Implementation of the Brandenburg Mixed Use Project would have significant impacts on related to geology if it would have any of the following effects:

- Expose significant numbers of people or structures to rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault;
- Expose people or structures to major geologic hazards that could result in loss, injury, or death related to strong seismic ground-shaking or seismic-related ground failure, including liquefaction or landslides;
- Result in substantial soil erosion or the loss of topsoil;
- Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse; or
- Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property.

b. Less-than-Significant Geology Impacts. Development of the proposed project would not be affected by slope instability or volcanic hazards. The project would not be expected to contribute to regional subsidence or long-term erosion hazards.

c. Significant Geology Impacts. Three potentially significant impacts are evaluated below. With implementation of each recommended mitigation measure, these impacts would be reduced to less than significant levels.

Impact GEO-1: Occupants of the project, dwelling units, and commercial space would be subject to seismic hazards. (S)

All structures in the Bay Area and their occupants are at risk of damage or injury from ground shaking in the event of an earthquake. The amount of ground shaking would depend on the magnitude of the earthquake, the distance from the epicenter, and the type of earth materials in between. Very strong to violent ground shaking will occur at the project site during expected earthquakes on the Hayward and other regional faults. This level of seismic shaking could cause extensive non-structural damage in buildings at the site. In addition, limited structural damage may occur.

Mitigation Measure GEO-1: Prior to the issuance of any site-specific grading or building permits, a design-level geotechnical investigation shall be prepared and submitted to the City of San Jose Public Works Department for review and confirmation that the proposed development fully complies with the California Building Code. The report shall determine the project site's surface geotechnical conditions and address potential seismic hazards such as liquefaction and subsidence. The report shall identify building techniques appropriate to minimize seismic damage. In addition, the following requirement for the geotechnical and soils report shall be met:

- Analysis presented in the geotechnical report shall conform with the California Division of Mines and Geology recommendations presented in the "Guidelines for Evaluating Seismic Hazards in California."[9]

All mitigation measures, design criteria, and specifications set forth in the geotechnical and soils report shall be followed.

It is acknowledged that seismic hazards cannot be completely eliminated even with site-specific geotechnical investigation and advanced building practices (as provided in the mitigation measure above). However, exposure to seismic hazards is a generally accepted part of living in the San Francisco Bay Area and therefore the mitigation measures described above reduces the potential hazards associated with seismic activity to a less-than-significant level. (LTS)

Impact GEO-2: Damage to structures or property related shrink-swell potential and/or settlements of project soils could occur. (S)

Soils underlying portions of the entire project site have moderate to high shrink/swell potential.[10] This condition occurs when expansive soils undergo alternate cycles of wetting (swelling) and drying (shrinking). During these cycles, the volume of the soil changes significantly. In addition, non-uniformly compacted imported fill has been placed at the site that could experience settlements up to 2 inches under a new building load. Structural damage, warping, and cracking of roads and sidewalks, and rupture of utility lines may occur if the potential expansive soils and the nature of the imported fill were not considered during design and construction of improvements.

Mitigation Measure GEO-2: In locations underlain by expansive soils and/or non-engineered fill, the designers of proposed building foundations and improvements (including sidewalks, roads, and utilities) shall consider these conditions. The design-level geotechnical investigation (required by Mitigation Measure GEO-1) shall include measures to ensure that potential damage related to expansive soils and non-uniformly compacted fill are minimized. Options to address these conditions may range from removal of the problematic soils and replacement, as needed, with properly conditioned and compacted fill, to design and construction of improvements to withstand the forces exerted during the expected shrink-swell cycles and settlements. (LTS)

[9] California Division of Mines and Geology (CDMG), 1997, *Guidelines for Evaluating Seismic Hazards in California*, CDMG Special Publication 117, 74 p.

[10] U.S. Department of Agriculture, 1968, Soils of Santa Clara County.

All mitigation measures, design criteria, and specifications set forth in the geotechnical and soils report shall be followed to reduce impacts associated with shrink-swell soils to a less-than-significant level.

Impact GEO-3: Dewatering-related subsidence and potential earth movements associated with the temporary shoring systems could cause settlement and damage to existing structures, roadways, and/or utilities. (S)

Dewatering of the subsurface, which would be required during construction of the below-ground parking facilities, would result in a lowered groundwater level at the site and in the vicinity. The lowered water level would increase the effective stress on the underlying sediments, potentially resulting in settlements that could affect existing improvements. In addition, it has been estimated that the shoring system could allow earth movements of up to 1 inch, creating further potential for damage to existing improvements.

> Mitigation Measure GEO-3: The design-level geotechnical investigation (required by Mitigation Measure GEO-1) shall evaluate the consolidation properties of the underlying sediments to determine the potential for settlements associated with dewatering and other potential earth movements. If it is determine that unacceptable settlements may occur with either active or passive dewatering systems, then alternative groundwater control systems that do not require continuous groundwater removal (e.g. slurry wall) shall be required. (LTS)

Full implementation of all mitigation measures, design criteria, and specifications set forth in the geotechnical and soils report would reduce potential impacts associated with shrink-swell soils to a less-than-significant level.

I. CULTURAL RESOURCES

This section presents an overview of the City's history, describes the cultural resources within and immediately adjacent to the project area, and provides mitigation measures for effects to cultural resources which may result from the implementation of the proposed project. The materials presented here in Chapter V are a summary, based on a technical background report on Cultural Resources that is presented as Appendix E to this EIR.

Background research for this section included a records search at the Northwest Information Center (NWIC) of the California Historical Resources Information System, Sonoma State University, Rohnert Park, California. The NWIC is an affiliate of the California Office of Historic Preservation and is the official state repository of cultural resources reports and records for a 16-county area, including Santa Clara County. Other cultural resources inventories reviewed include: (1) California Inventory of Historic Resources;[1] (2) Five Views: An Ethnic Historic Site Survey for California;[2] (3) California Historical Landmarks;[3] (4) California Points of Historical Interest;[4] (5) Directory of Properties in the Historic Property Data File for Santa Clara County;[5] and (6) City of San Jose's Historic Resources Inventory.[6] The California Native American Heritage Commission (NAHC) was consulted regarding cultural resources or concerns about the project area. The NAHC did not identify Native American resources within the study areas. The San Jose Historical Museum, administered by History San José, and the Santa Clara County Historical and Genealogical Society were contacted to solicit any information or concerns their organizations may have about historical resources in the project area. No response had been received as of July 29, 2003.

1. Setting

The section summarizes San Jose's history, from about 12,000 years ago, when Native Americans first entered the area, to modern times. The cultural resources within the project area follow. Lastly, laws, codes, and regulations relevant to cultural resources are presented.

a. Prehistory and Ethnography. The San Jose area was probably settled by native Californians between 12,000 and 6,000 years ago. Penutian-speaking peoples migrated into central California around 4,500 year ago and were firmly settled around San Francisco Bay by 1,500 years ago.[7] The descendants of the native groups who lived between the Carquinez Strait and the Monterey area

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[1] California Department of Parks and Recreation, 1976. *California Inventory of Historic Resources.*

[2] California Department of Parks and Recreation, Office of Historic Preservation, 1988. *Five Views: An Ethnic Historic Site Survey for California.*

[3] California Department of Parks and Recreation, Office of Historic Preservation, 1990. *California Historical Landmarks.*

[4] California Department of Parks and Recreation, Office of Historic Preservation, 1992. *California Points of Historical Interest.*

[5] California Department of Parks and Recreation, Office of Historic Preservation, 2000. *Directory of Properties in the Historic Property Data File.*

[6] City of San Jose, Planning Divisions, 2003. "Historic Resources Inventory." Website: www.ci.san-jose.ca.us/planning/sjplan/Historic/pdf/Historic_resources.pdf.

[7] Ibid.

prefer to be called Ohlone,[8] although they are often referred to by the name of their linguistic group, Costanoan. San Jose is located within the ethnographic territory of the Tamyen tribelet of Ohlone, who occupied a large area in the South Bay. The basic Ohlone social unit was the family household, which was made up of about 15 individuals.[9,10] Households grouped together to form villages. In the San Jose area, many of these villages were located along the Guadalupe River, Coyote Creek, and other waterways. Ohlone culture was radically transformed when European settlers moved into northern California. These settlers set up the mission system, which used the native peoples for labor, and almost destroyed the native culture by exposing the Ohlone to diseases to which they had no immunity. After the secularization of the missions in 1834, native people in the Bay Area moved to ranchos, where they worked as manual laborers.[11]

b. History. San Jose is California's oldest civil settlement, founded in November 1777 under orders from Governor Felipe de Neve,[12] on the banks of the Guadalupe River at what is now the corner of Hobson and Vendome streets.[13] The first courthouse in the region, an adobe known as the *juzgado*, was built in 1783; a second was built on higher ground, to avoid flooding, about five years later. This building remained the seat of local government until 1850, when work began on the county courthouse which remains, though in a modified form, a major presence on today's St. James Square. In 1849, San Jose served briefly as California's first capital. In the years following the Civil War, San Jose continued to grow. Trinity Episcopal Church, the City's oldest surviving religious building, was built in 1863 of redwood at the corner of Second and St. John streets. In 1892, both the First Unitarian Church on St. James Square and the City's first federal building, the old post office at 110 Market Street (now the civic art museum) were completed.

San Jose's first residential neighborhoods grew up around its downtown commercial core. As time passed, adobes were replaced by stately Victorians, which in time were joined by Craftsman bungalows. Many of the City's historic homes can still be seen in the St. James Square and Naglee Park neighborhoods.

San Jose was actively involved in an industry that was important to the Santa Clara Valley economy: agriculture. Santa Clara Valley began supplying hardy wheat and other grains to the California gold fields in the 1850s.[14] San Jose was known for producing a wheat grain so hardy that farmers could let the cut wheat lie in field piles with no worry of infestation by weevils. San Jose's wheat competed with harvests from Oregon and Washington for a share of the lucrative European market.[15] A French native, Pierre Sansevain, built the first flour mill on the Guadalupe River in 1844. Wheat production in the Santa Clara Valley flourished until around 1870, when land values began to increase and other

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[8] Margolin, Malcolm, 1978. *The Ohlone Way: Indian Life in the San Francisco-Monterey Bay Area.*

[9] Harrington, J.P., 1933. Report of Fieldwork. *Annual Report of the Bureau of American Ethnology for the Years 1931-1932.*

[10] Broadbent, Sylvia M., 1972. *The Rumson of Monterey: An Ethnography from Historical Sources.* Contributions of the University of California Archaeological Research Facility, Berkeley.

[11] Levy, Richard, op.cit.

[12] Gudde, Erwin G., 1998. *California Place Names: The Origin and Etymology of Current Geographical Names.*

[13] Hoover, et al., 1990. *Historic Spots in California.*

[14] Beilharz, Edwin A. and Donald O. DeMers, Jr., 1980. *San Jose, California's First City.*

[15] Beilharz, Edwin A. and Donald O. DeMers, Jr., 1980. op. cit.

more profitable crops were farmed. As standard tools and machinery became more available, commercial agriculture rose to become the dominant agricultural industry in and around San Jose. When Louis Pellier successfully introduced the French prune to wild plums trees in his San Jose nursery, a new and vibrantly lucrative crop was created. So important was the newly-created prune that it ". . .was, for over 70 years, the mainstay of the valley's economy."[16] With the growth of the dried fruit industry, fueled greatly by the development of the French prune, fruit cooperatives and canneries sprang up to consolidate and process the valuable crops for export.

San Jose has always been known for being on the cutting edge of developments in electronics. In 1909, the City was the site of a successful electronic endeavor: the world's first radio broadcast station was established at the corner of First and San Fernando Streets by Dr. Charles Herrold. In the years following World War II, the Santa Clara Valley experienced tremendous growth. Electronics, aviation, and semiconductor companies opened offices and factories in "Silicon Valley," creating thousands of jobs for returning military personnel, defense workers, and their families. San Jose was transformed from a market town with an agricultural economic base to a business and residential community known for its high-technology companies.

c. **Project Area Historical Background.** Chester S. Lyman re-surveyed the city of San Jose in 1848, one year after a survey by James Hutton was declared invalid because it was so poorly conducted. Lyman's work did not include the area west of Market Street and north of Julian Street, and roughly half of the project area was not included in his survey. The unsurveyed area was used for agricultural purposes until the San Francisco and San Jose Railroad line opened in 1864.[17] Hare's 1872 *Map of the City of San Jose* shows the location of the railroad depot between N. San Pedro and Terraine streets.[18]

The entire study area is located within Fallon's 5,000-acre property as shown in the 1876 Thompson and West's Directory.[19] However, Captain Thomas Fallon, an Irish immigrant, built his home just outside the study area on San Pedro Street near St. John Street.

In October 1850, Louis Pellier established a nursery, City Gardens, at which many early horticultural experiments in San Jose were conducted. The nursery was originally located southwest of the project area on the northwest corner of North San Pedro Street and Chaboya (or Chabolla) Alley, but eventually extended into the project area. City Gardens expanded to north of Devine Street in an area known as "Pellier's Survey."[20]

The property north of Julian Street between Terraine and Pleasant Streets was owned by Pellier's friend, John Quincy Adams Ballou. Ballou was one of the progenitors of California's dried fruit

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[16] Beilharz, Edwin A. and Donald O. DeMers, Jr., 1980. op. cit.

[17] Urban Programmers, 1999. *Cultural Resources Evaluation West Julian Street General Plan Amendment*, p. 3.

[18] Basin Research Associates, 2000. *Archaeological Evaluation Report, Northern Gateway Project, Legacy Partners Office Complex, West Julian Street/Devine Street, City of San Jose, Santa Clara County, California*, p. 6.

[19] Urban Programmers, 1999. op. cit., p. 4.

[20] Arbuckle, 1985, in Urban Programmers, 1999, op. cit., p. 5.

industry after successfully grafting French Prunes to wild plum trees. The land remained in Ballou's estate until 1909 when it was sold to the John Bean Spray Company.[21]

After the opening of the railroad station in 1864, new businesses developed in the area around West Bassett and North Market Streets. The 1884 Sanborn Insurance Company map depicts the following businesses on North San Pedro Street between Bassett and West Julian Streets: livery stables, the Albert Lake Box Company (345 North San Pedro), and the Toftle Brothers Box and Nail House. The opposite side of the street included J.Z. Anderson Fruit Packing, L.B. Sresorich Fruit Packing, fruit drayage, and storage. The Eureka Hotel (annex) faced North Market at Bassett Street. Four residential homes faced West Julian Street, and one faced North San Pedro Street.[22]

Prior to 1884, the Eureka Hotel was located on the east side of North Market Street at Bassett Street. The hotel expanded on the west side of North Market Street with a two-story annex. By 1889, the hotel was three stories and occupied one-third of the block southwest of Bassett and North Market Streets.

In 1908, the John Bean Spray Pump Company replaced the Pacific Brandy Distiller and Ropers Fruit Depot at 217 West Julian Street. The company produced food processing equipment and farm sprayers in its building, which covered most of the block between Terraine and Pleasant Streets. The Lorentz Cooperage was the only other business on the street. During the construction of the Guadalupe Expressway (Route 87), both of the buildings were removed.[23]

In 1910, the Walsh-Col Company, a wholesale grocery supply and warehouse, was located at 341 North Market Street in the area between North Market, West Julian, North San Pedro, and Bassett Streets. Starting in 1920, the Service Motor Transportation Company, a freight business, also occupied the building while the wholesale grocery business continued. In 1960, Goodwill Industries of Santa Clara County began using the building as a warehouse until its sale to the City of San Jose for use as a storage facility. The front, or primary, façade of the building was demolished when the Market Street overpass was constructed, but the secondary facade of the building remains on North San Pedro Road.[24]

In the 1930s, the Golden Bear Potato Chip Factory was located on the southwest corner of North San Pedro and West Julian Streets. In 1935, the building became the Eggo Food Products Company, owned by the Dorsa brothers. The Dorsas remodeled their building following a serious fire in 1946, and added a facade to the front section. The Dorsas continued to expand their holdings until the family business occupied most of the block. In 1970, the building on North San Pedro was sold and the building on the West Julian block was leased to Industrial Tube and Steel Corporation. The buildings were sold in 1970 and have been occupied by several warehouses with addresses on West Julian, Terraine, and Bassett Streets.[25,26]

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[21] Clayton, 1906, in Urban Programmers, 1999, op. cit., p. 5.

[22] Urban Programmers, 1999. op. cit., p. 4.

[23] Urban Programmers, 1999. op. cit., p. 8.

[24] Urban Programmers, 1999. op. cit., p. 7.

[25] Urban Programmers, 1999. op. cit., p. 8.

[26] Ibid.

The southwest corner of the intersection of North San Pedro and Bassett Streets was occupied by the Garden City Brewing Company in 1897 and owned by the Geoffroy family. Following the Volstead Act of 1919, the family changed the name from Garden City Brewing to Geoffroy Brothers, brewers' agents. During Prohibition, some family members became involved in different business, but most did not list their occupations. The name Garden City Brewing Company was re-instated by 1935 and then again reverted to Geoffroy Brothers in 1940. As late as 1960, the Geoffroy Brothers had a trucking firm at 353 North San Pedro where they had previously brewed beer. In the late 1940s and 1950s, Cal Neon Signs occupied part of the property at 355 North San Pedro. That site was redeveloped in the 1960s for a Postal Service vehicle repair facility, then occupied by American Tow Company. From the 1970s into the 1990s, auto repair companies occupied the building. It is now vacant.[27]

The Albert Lake Box Company, which later became the San Jose Box Company, occupied 345 North San Pedro Street, in the center of the block. The site was redeveloped in 1929 for Blake, Moffitt and Towne, a national wholesale distributor of paper products. This concrete warehouse was transferred to the U.S. Postal Service for use as an annex in 1960. A variety of companies have occupied the building for the last 40 years. On the north side of the block, lumber storage sheds at 185 West Julian Street were also replaced with a warehouse in 1928. H.C. Jorgensen, a general contractor, constructed the building, but his business failed the following year and the warehouse remained vacant until 1930. Holmes Express and Holmes Wholesale occupied the site for 10 years until 1940, when Stuart Oxygen became the new occupant. From 1944 to 1959, Place and Gera, a wholesale drug firm, occupied the building, followed by Refrigeration Maintenance. From the 1970s to the 1990s auto repair companies occupied the building. The building is now vacant.[28]

A home built in the early 1800s at 195 West Julian was demolished in the late 1890s. The Independent Lumber Mill was directly across the street in 1891, and two residences were situated behind the mill. By 1915, Terraine Street extended through to West Julian Street, and residences now occupy the entire block including the area once occupied by the mill.[29]

By 1935 many of the residences within the study area had been replaced with industrial buildings. In the 1950s, storage and other commercial use buildings were prevalent in the area. Today, the majority of the study area is used for parking, equipment repair, and storage.[30]

d. Known Cultural Resources. Known cultural resources within the project area are described below. Cultural resources in the project area were obtained from four different sources. The types of cultural resources include historical architectural resources and one commemorative site.

Table V.I-1 shows the cultural resources within the project area identified by background research within the four sources.

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[27] Urban Programmers, 1999, in Basin Research Associates, 2000. op. cit., p. 8.

[28] Urban Programmers, 1999. op. cit., p. 9.

[29] Ibid.

[30] Urban Programmers, 1999. op. cit., p. 10.

(1) Previously-Identified Resources. Buildings and structures proposed for demolition within the project area were previously reviewed for historical significance by architectural historian Ward Hill.[31] Hill's report synthesized findings set forth in previous cultural resources evaluations and surveys conducted for smaller study areas within the currently-proposed project area,[32,33] as well as for the larger downtown San Jose area.[34] Following Hill's report, Dill Design Group completed a historical and architectural evaluation of 340 North San Pedro Street.[35]

Table V.I-1: Cultural Resources Within and Adjacent to the Project Area, by Source

California Historical Resources Information System	No known archaeological sites.
Directory of Properties in the Historic Resources Data File for Santa Clara County	183 West St. James Street, "Pellier Park"
City of San Jose Historic Resources Inventory	183 West St. James Street, "Pellier Park" 198 West Julian Street
Other Published Listings	151 West St. James Street (CHL #434/SJCL/SCCHRI) 183 West St. James Street, "Pellier Park" (SJCL/SCCHRI)

Sources: CHL = California Historical Landmark;
SJCL = San Jose City Landmark;
SCCHRI = Santa Clara County Heritage Resource Inventory.

Most historical evaluations conducted for buildings within the project area were conducted with the use of the City of San Jose's Historic Evaluation Sheet, which uses a numerical evaluation system established by the San Jose Historic Landmarks Commission. The use of the Historic Evaluation Sheet generates a numerical significance rating for a property based on two main factors: (1) the degree to which the architectural property possesses historical qualities, such as important historical associations or exceptional craftsmanship and design; and (2) whether the property's physical condition is sufficient to convey the historical qualities for which it is important. An evaluation score of 33 points or higher rates a resource as "significant" in San Jose's "Hierarchy of Significance" for historic resources, and the resource is termed a "Structure of Merit." If a property is assigned a score of 67 points or higher, it is eligible for listing as a Candidate City Landmark. Eligibility for City Landmark status is used by the City as a threshold to determine whether an impact to a given property constitutes a significant adverse impact under CEQA.

Historical-significance point ratings for buildings and sites within the project area are listed in Table V.L-2 and mapped on Figure V.I-1. Although the buildings at 199 Bassett Street and 361 North San Pedro Street were not evaluated with the San Jose Historic Evaluation Sheet and therefore do not have a numerical evaluation score, they do not appear to be eligible for listing on the National Register and the California Register.[36]

One commemorative site (183 West St. James, "Pellier Park"), is listed as a significant historical resource in several inventories. Pellier Park, located at 183 West St. James Street (APN 259-32-73), is a California Historical Landmark (#434); a San Jose City Landmark listed in the San Jose Historic

[31] Hill, Ward, 2001. op. cit.

[32] Urban Programmers, 1999. *Cultural Resources Evaluation West Julian Street General Plan Amendment.*

[33] Urban Programmers, 1999. *Cultural Resources Evaluation West Julian Street/Devine Street Study Area.*

[34] Dill Design Group, 2000. *Historic Resources Survey-Downtown San Jose Year 2000.*

[35] Dill Design Group, 2002. *Historical and Architectural Evaluation for a Commercial Structure at 340 North San Pedro Street, San Jose, California, Santa Clara County.*

[36] Hill, Ward, 2001. op. cit.

Table V.I-2: Evaluation Status of Buildings and Sites within the Project Area

Address	APN #	Date Built	Significance	Evaluator	Eval. Pts.
1. 178 Bassett St	259-32-054	1912	Non-significant	UP	13.4
2. 199 Bassett St	259-23-016	c. 1970	Non-significant	WH	n.c.
3. 181 Devine St	259-32-035	1872	Non-significant	UP	27.54[a]
4. 330 North Terraine St	259-32-045	c. 1915	Non-significant	UP	14.6
5. 380 North Terraine St	259-32-055	1938	Non-significant	UP	5.79
6. 274 North San Pedro St	259-33-007	N/A	Non-significant	N/A	N/A
7. 299 North San Pedro St	259-32-068	N/A	Non-significant	UP	5.2
8. 340 North San Pedro St	259-33-017	N/A	Non-significant	UP/DDG [b]	38.47
9. 345 North San Pedro St	259-32-050	N/A	Non-significant	UP	24.61
10. 361 North San Pedro St	259-23-005	c. 1970	Non-significant	WH	n.c.
11. 355 North San Pedro St	259-32-056	c. 1962	Non-significant	UP	15.61
12. 278 Terraine St	259-32-033	1910	Non-significant	UP	6.4
13. 153 West Julian St	259-32-052	1930	Non-significant	UP	23.88
14. 175 West Julian St	259-32-051	1935	Non-significant	UP	16.8
15. 185 West Julian St	259-32-044	c. 1928	Non-significant	UP	16.2
16. 198 West Julian St	259-32-049	Moved 1914	Non-significant	UP	15.8
17. 183 West St. James[c]	259-32-073	1977[d]	Significant	RDA/WH	77

Notes: RDA - Redevelopment Agency; WH = Ward Hill; DDG = Dill Design Group; UP = Urban Programmers; N/A = Not available.

[a] This evaluation score is based on the correction of a mathematical error in Urban Programmer's 1999 Tally Sheet (part of the City of San Jose Historic Evaluation Sheet).

[b] In 1999, Urban Programmers evaluated 340 North San Pedro using the City of San Jose's Historic Evaluation Sheet, and assigned the property a score of 16, a rating that classified it as ineligible for listing on the City's Historic Resources Inventory. In 2002, however, Dill Design Group completed *Historical and Architectural Evaluation of 340 North San Pedro, San Jose,* and assigned a rating of 38.47, which qualifies the property for listing as a "Structure of Merit" in the City of San Jose Historic Resource Inventory. In the same report, Dill Design Group noted that because of a lack of integrity, as well as the existence of other properties in San Jose that reflect the same historical association, 340 North San Pedro does not appear eligible for listing in either the National or California Registers.

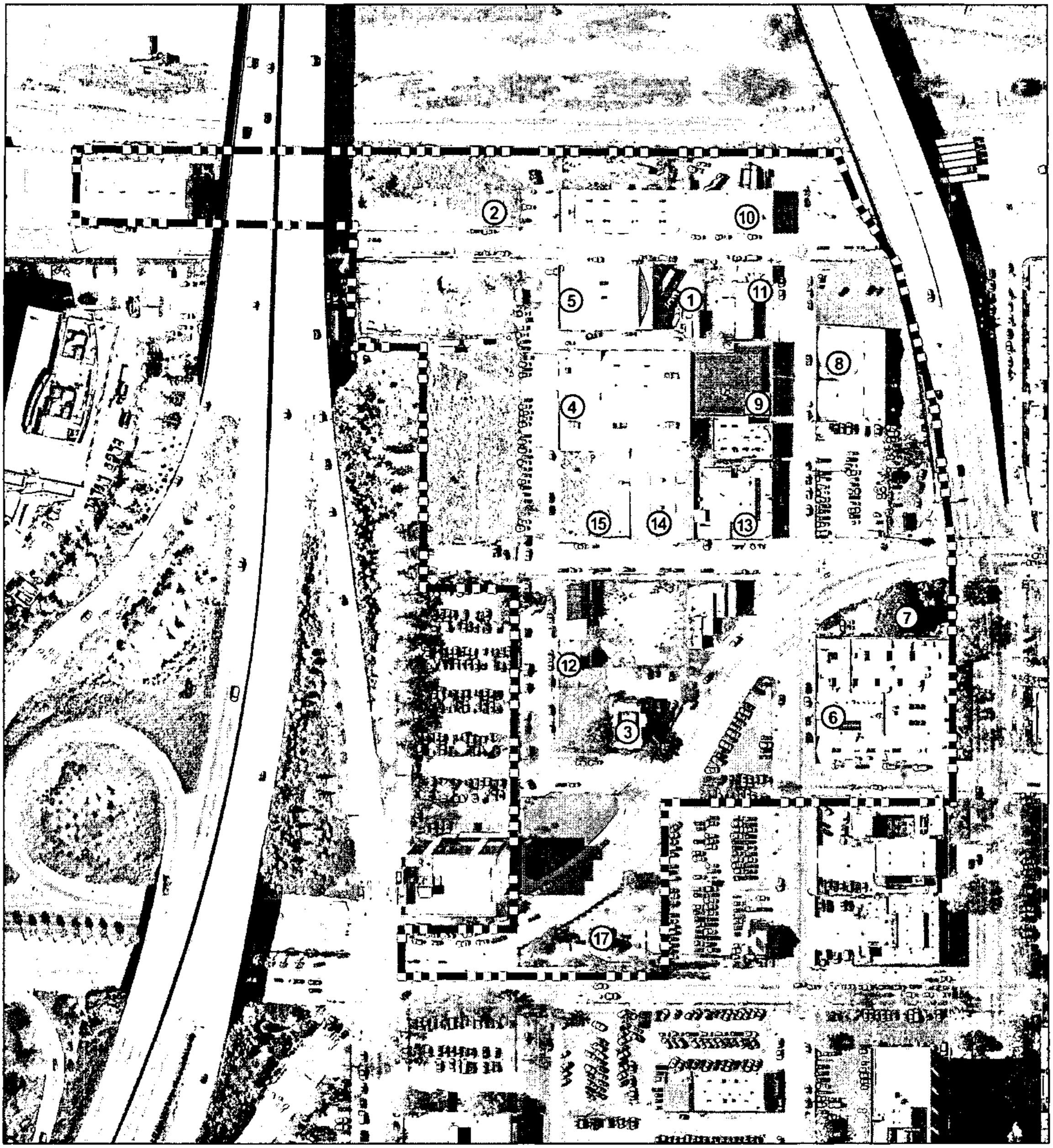
[c] Pellier Park.

[d] This date indicates when Pellier Park was formally dedicated by the City of San Jose. Louis Pellier's nursery, City Gardens, was established at this location in 1850.

Resources Inventory; and was listed in the Santa Clara County Heritage Resource Inventory in 1979. It was the site of Louis Pellier's nursery, called "City Gardens." City Gardens became a popular picnicking site for San Jose residents, but was eventually sold off piece-by-piece by Pellier in the 1860s. Louis Pellier died in 1872.[37]

(2) Archaeological Sensitivity. Portions of the project area have been assessed to determine the likelihood of whether subsurface archaeological deposits exist below the present built environment. These evaluations include historical research to identify the property-specific history of subject parcels within the project area. This historical information was then used to predict the type and nature of archaeological remains that may be present within the project area.

[37] Basin Research Associates, 2000. op. cit.



LSA

FIGURE V.I-1

Brandenburg Mixed Use Project/
North San Pedro Housing Sites
Buildings Evaluated for
Potential Historic Significance

N

0 100 200
FEET

PROJECT SITE

17 EVALUATED BUILDINGS

SOURCE: CITY OF SAN JOSE, 2003.

I:\IMAGES\GRAPHICS\JOBS\SJO230 BRANDENBURG\FIGURES\FIG_VII.AI (08/15/03)

Portions of the project area are sensitive for the presence of potentially-significant prehistoric and historical archaeological deposits.[38] The Brandenburg Mixed-Use Project site has a moderate to high likelihood to contain prehistoric and historical archaeological features and deposits.

Prehistoric Archaeological Sensitivity. The project area offered early inhabitants a diversity of rich ecological communities from which to gather necessary plant and animal resources. Although no prehistoric archaeological sites have been recorded in or adjacent to the project area, research indicates that human occupancy and use of the general area spans 5,000 to 7,000 years before present, and possibly longer.

The project area's proximity to the Guadalupe River, and the historically-documented seasonal flooding that has occurred nearby, suggest that the project area has a moderate to high sensitivity for the presence of prehistoric archaeological deposits beneath flood-deposited soils. Numerous prehistoric archaeological sites are documented in similar environmental contexts relatively near the project area.[39] A review of recorded prehistoric sites in Santa Clara Valley (as of 1982) indicates that nearly 43 percent were situated in a linear arrangement along water courses, such as the Guadalupe River.[40]

Historical Archaeological Sensitivity. The project area is in an area of high historical archaeological sensitivity. California's first civil settlement, Pueblo de San Jose de Guadalupe, was established near the project area, with the core of Pueblo buildings located approximately 500 feet south-southeast.[41] Several types of archaeological features or deposits may occur within and near this area of intensive historical activity. Previous research has identified the probable locations of former buildings, structures, roads, and water conveyance features associated with the Spanish-era Pueblo.

Hendry and Bowman (1940) generated a map that depicts the locations of all the resource-types mentioned in the paragraph above (see Figure V.I.2) in relation to contemporary American-period street alignments. This map shows the locations of several Pueblo buildings adjacent to and southeast of the project area. However, this map only depicts buildings and structures from 1803 to 1850. It is possible that additional buildings may have been within the project area, but were absent by the time the Hendry and Bowman data were gathered.

Three roads important to the economic and institutional functioning of the Pueblo are also depicted on the map. These roads include: (1) "Old Road from Alviso," which lies to the east and parallel to North San Pedro Street, and runs generally north-south; "Old Road to Santa Clara," which lies roughly parallel to Santa Clara street and runs generally east-west; and "Old Road to Monterey," which follows the current alignment of Market Street.[42]

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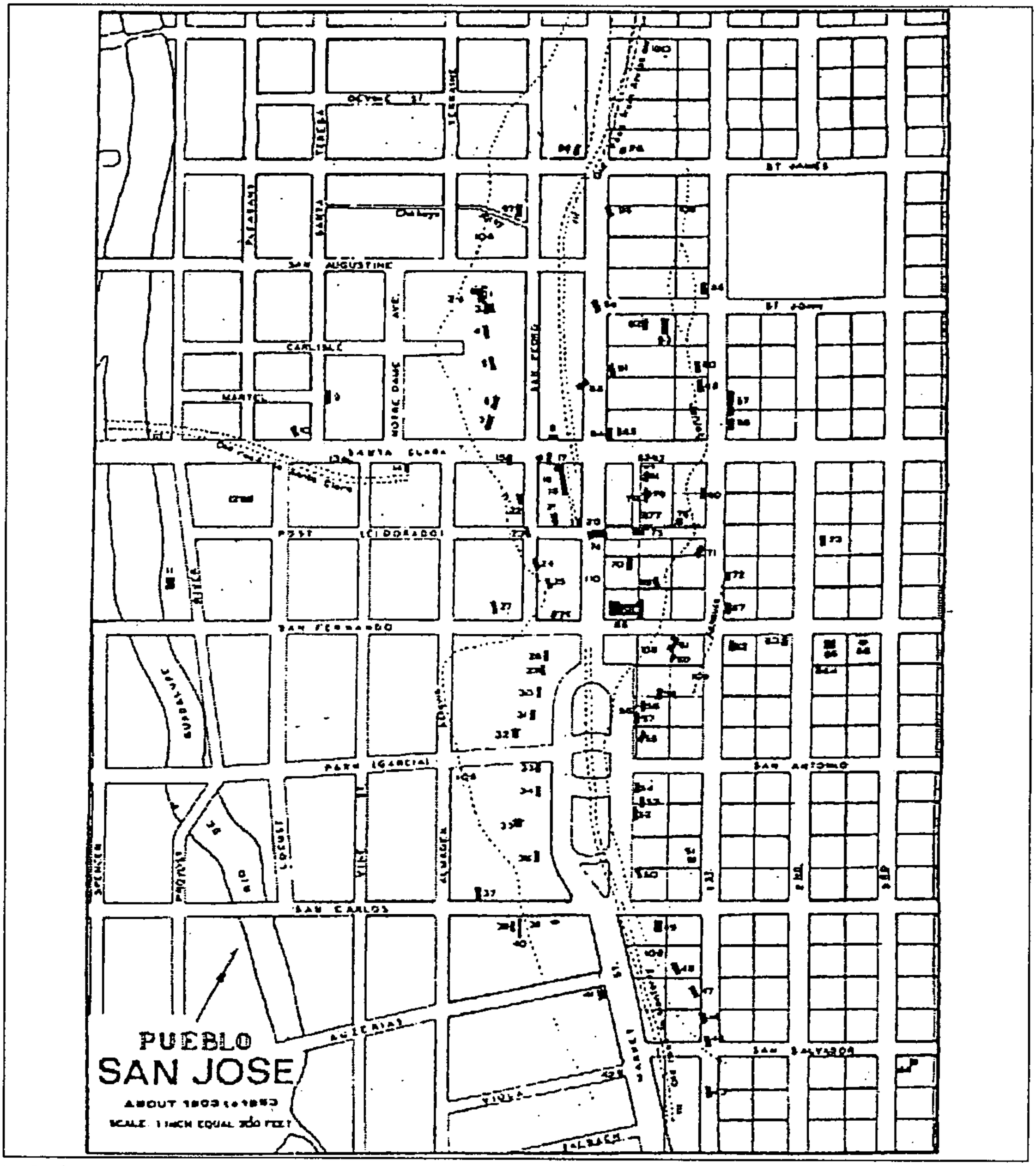
[38] Roop, William, 1992. *Appendix 2: A Cultural Resource Evaluation for the Downtown San Jose Strategy Plan Environmental Impact Report.*

[39] Basin Research Associates, 2000. op. cit.

[40] Bergthold, 1982, in Basin Research Associates, 1993. *Cultural Resources Review for the City of San Jose 2020 General Plan Update, Santa Clara County, California.*

[41] Dill Design Group, 2000. op. cit., p. 18.

[42] Ibid.



LSA

FIGURE V.I-2

Brandenburg Mixed Use Project/
North San Pedro Housing Sites
Locations of Sites Related to
Pueblo de San Jose de Guadalupe

SOURCE: HENDRY AND BOWMAN, 1940. (COURTESY OF BANCROFT LIBRARY)

I:\IMAGES\GRAPHICS\JOBS\SJO230 BRANDENBURG\FIGURES\FIG_V.I2.AI (08/14/03)

An *acequia*, or water conveyance ditch, is also depicted within portions of the project area as shown on the Hendry and Bowman map . The *acequia* was constructed sometime in the late 1770s or early 1780s to provide irrigation water for cultivatable land, and drinking water for the *pobladores*, or pueblo inhabitants. Research indicates that the *acequia* was used, or at least maintained, in the Spanish, Mexican, and American Periods, until falling into disrepair in 1855. The *acequia* was approximately three to four feet deep and from six to 10 feet wide on average, and was identified as the "old *acequia*" in maps published as late as 1872. The *acequia* ran . . .

> . . .in the same alignment as the reconfigured Julian Street. From north to south, the *acequia* appears to have been situated about mid-block north of West Julian between Market and North San Pedro streets, included the northwest corner of the block between West Julian Street and Devine Street on the west side of North San Pedro Street, crossed North San Pedro skirting the northwest corner of North San Pedro and Devine streets, crossed Devine Street and proceeded through the mid-portion of the block between Devine and St. James Street between North San Pedro and Terraine Streets.[43]

Previous studies have identified this *acequia* as a potentially significant archaeological feature not only for its design and engineering qualities, but also for the artifacts that may have been deposited after the ditch fell into disuse.[44]

Historical archaeological deposits may also be present in the project area due to the number of documented commercial, industrial, and residential buildings and structures that once occupied the project area. Such deposits may include privies, trash pits, or structural remains associated with businesses and homes, and in turn may contain important information about several distinct periods in San Jose's historical development.

e. Regulatory Context. The sections below briefly discuss laws, codes, and regulations applicable to cultural resources within the City of San Jose.

(1) California Environmental Quality Act. The California Environmental Quality Act (CEQA) states that a substantial adverse change in the significance of a historical resource is a significant effect on the environment (§15064.5(b)). CEQA defines a "historical resource" as a resource which is eligible for listing on the California Register (California Register), listed in a local register of historical resources (as defined at PRC 5020.1(k)), identified as significant in a historical resource survey meeting the requirements of section 5024.1(g) of the Public Resources Code, or determined to be a historical resource by a project's lead agency (§15064.5(a)). An historical resource consists of "Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California.... Generally, a resource shall be considered by the lead agency to be 'historically significant' if the resource meets the criteria for listing on the California Register of Historical Resources" (§15064.5(a)(3)).

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[43] Basin Research Group, 2000. op. cit., p. 4.

[44] Basin Research Group, 2000. op. cit., pp. 4-5.

(2) Local Programs. The City of San Jose is a "Certified Local Government" which has authority from the California Office of Historic Preservation to operate its own historic preservation program. The City's Historic Preservation Ordinance (Municipal Code Chapter 13.48), adopted in 1975, authorizes San Jose to maintain an inventory of historic resources, establish a historic landmarks commission, preserve historic properties using a landmark designation process, require historic preservation permits for additions or alterations to designated City Landmarks or buildings within City Historic Districts, and provide financial incentives through the Historic Property Contracts program.[45,46]

The City of San Jose's historic preservation policies and programs are briefly summarized in the following two categories.

(3) City Landmarks Program. Each of San Jose's City Landmarks "represents a physical connection with significant persons, activities, or events from our past."[47] Landmarks may be nominated by the property owner, the City Council, or the City Historic Landmarks Commission. After a landmark is nominated, the City Council sets a date for a public hearing to consider the nomination and requests a recommendation from the Historic Landmarks Commission. The Commission holds a public hearing to consider the proposed landmark, then forwards its recommendation to the City Council. Then, the City Council holds a public hearing at which it approves, approves with modifications, or disapproves the nomination. Once a property is designated a City Landmark, the property owner may be eligible for tax exemptions. Alterations to designated landmarks must be approved by the City's Department of Planning, Building, and Code Enforcement through an Historic Preservation Permit process which includes review and recommendation by the Historic Landmarks Commission.[48,49]

(4) San Jose 2020 General Plan Policies. San Jose's general plan reaffirms the City's commitment to preserve its cultural heritage. Ten policies in the Historic, Archaeological and Cultural Resources sub-section of the General Plan that pertain to Cultural Resources are included in Appendix E.

2. Impacts and Mitigation Measures

Implementation of the proposed project has the potential to impact cultural resources. Significance criteria, the potential impacts of several components of the proposed project, and recommended mitigation measures are described below.

a. Criteria of Significance. Significance thresholds based on the CEQA Guidelines are presented for cultural resources, followed by a description of the evaluation criteria and process used for potentially significant historic properties.

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[45] San Jose Department of City Planning and Building, 1995. *What is Historic Preservation?*

[46] San Jose Department of Planning, Building and Code Enforcement, 2000a. *Incentives for Ownership of a Designated City Landmark.*

[47] San Jose Department of Planning, Building and Code Enforcement, 2000b. *What is a Designated City Landmark?*

[48] San Jose Department of Planning, Building and Code Enforcement, 2000a, op. cit.

[49] San Jose Department of Planning, Building and Code Enforcement, 2001. *Historic Preservation Permit Process.*

(1) Cultural Resources Criteria of Significance. The proposed project would have a significant effect on cultural resources if it would:

- Result in the physical demolition, destruction, relocation, or alteration of a historical resource that is eligible for listing on the California Register, listed in a local register of historical resources (as defined at PRC 5020.1(k)), identified as significant in a historical resource survey meeting the requirements of Section 5024.1(g) of the Public Resources Code, or determined to be a historical resource by the City of San Jose (§15064.5(a));
- Directly or indirectly destroy a unique archaeological resource or site or unique geologic feature; or
- Disturb any human remains, including those interred outside of formal cemeteries.

(2) Historic Properties Significance Criteria. Properties in the City of San Jose that are evaluated for historic significance are evaluated under the National Register of Historic Places (National Register) criteria, the California Register of Historical Places (California Register), and under San Jose's local process.

i. ***National Register of Historic Places Criteria***. The National Register considers the quality of significance in American history, architecture, archeology, engineering, and culture that is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and:

Criterion A: that are associated with events that have made a significant contribution to the broad patterns of our history; or

Criterion B: that are associated with the lives of persons significant in our past; or

Criterion C: that embody the distinctive characteristics of a type, period, or method of construction, or that represents the work of a master, or that possesses high artistic values, or that represents a significant and distinguishable entity whose components may lack individual distinction; or

Criterion D: that have yielded, or may be likely to yield, information important in prehistory or history.

ii. ***California Register of Historical Resources Criteria***. Properties in the City of San Jose that are evaluated for historical significance are also considered under the criteria of the California Register. The significance criteria are parallel to those used by the National Register, but are oriented to document the unique history of California. The California Register consists of resources that are listed automatically, under the provisions of Public Resources Code §5024.1 (which are listed in or eligible for the National Register or State Historical Landmarks numbered 770 or greater), and those that may be listed by application and acceptance by the California Historical Resources Commission.

In order for a resource to be eligible for listing in the California Register of Historical Resources, a building, site or object must meet the following standards of review:

A property must be significant at the local, state or national level, under one or more of the following criteria:

1. It is associated with events or patterns of events that have made a significant contribution to the broad patterns of California's history and cultural heritage.

2. It is associated with the lives of persons important to the nation or California's past.

3. It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.

4. It has yielded, or may be likely to yield, information important to the prehistory or history of the State or the nation.

"All resources nominated for listing must have integrity, which is the authenticity of a historical resource's physical identity evidenced by the survival of characteristics that existed during the resource's period of significance. Resources, therefore, must retain enough of their historic character or appearance to be recognizable as historical resources and to convey the reasons for their significance. Integrity is evaluated with regard to the retention of location, design, setting, materials, workmanship, feeling and association. It must also be judged with reference to the particular criteria under which a resource is proposed for nomination."

iii. <u>City of San Jose Historic Preservation Ordinance and Evaluation Procedures</u>. Under the City of San Jose Historic Preservation Ordinance (Chapter 13.48 of the Municipal Code), preservation of historic landmarks and districts is promoted in order to stabilize neighborhoods and areas of the city; to enhance, preserve and increase property values; carry out the goals and policies of the city's general plan; increase cultural, economic and aesthetic benefits to the city and its residents; preserve, continue and encourage the development of the city to reflect it's historical, architectural, cultural, and aesthetic value or traditions; protect and enhance the city's cultural and aesthetic heritage; and to promote and encourage continued private ownership and utilization of such structures. Buildings and sites that qualify based on historical, architectural, cultural, aesthetic and engineering interest or value are evaluated according to the following criteria:

- Identification or association with persons, eras or events that have contributed to local, regional, State or national history, heritage or culture in a distinctive, significant or important way;
- Identification as, or association with, a distinctive, significant or important work or vestige:
  - of an architectural style, design or method of construction;
  - of a master architect, builder, artist or craftsman;
  - of high artistic merit;
  - the totality of which comprises a distinctive, significant or important work or vestige whose component parts may lack the same attributes;
  - that has yielded or is substantially likely to yield information of value about history, architecture, engineering, culture or aesthetics, or that provides for existing and future

generations an example of the physical surrounds in which past generation lived or worked; or

- that the construction materials or engineering methods used in the proposed landmark are unusual or significant or uniquely effective.

The factor of age alone does not necessarily confer a special historical, architectural, cultural, aesthetic, or engineering significance, value or interest upon a structure or site, but it may have such effect if a more distinctive, significant or important example thereof no longer exists.

A historic district may be established if the City Council finds that the following criteria are satisfied: (1) that said proposed historic district is a geographically definable area of urban or rural character, possessing a significant concentration or continuity of site, buildings, structures or objects unified by past events or aesthetically by plan or physical development, and (2) the district has special historical, architectural, cultural, aesthetic or engineering interest or value of an historical nature.

iv. ***Historic Evaluation Procedure.*** The San Jose Historic Landmarks Commission has established a quantitative process, based on the work of Harold Kalman (Kalman 1980), by which historical resources are evaluated for significance. This Historic Evaluation Criteria and the related Evaluation Rating Sheets are utilized within the Guidelines for Historic Reports published by the City's Department of Planning, Building and Code Enforcement, as last revised on October 19, 1999.

This numerical evaluation system has the following categories of significance:

67-134 points	Candidate City Landmark
33-66 points	Structure of Merit
1-32 points	Evaluated but found to be non-significant

As a matter of administrative policy, the City of San Jose considers designated City Landmarks and Candidate City Landmarks generally defined as those properties scoring 67 points and above as the threshold for determining significant historic resources under CEQA review. Properties scoring 33-67 points have historical importance, but for purposes of CEQA, are not considered historically significant unless they are:

- Listed or formally determined eligible for the National Register
- Listed in or eligible for the California Register; or
- The City determines that the property is historically significant.

The criteria set forth in San Jose's Historic Preservation Ordinance is targeted at local significance and varies somewhat from that set forth for either the National or California Registers.

b. Historic Resources within Project Area. All properties within the project area have been evaluated to determine if they meet the criteria necessary for consideration as historical resources, as defined by California Code of Regulations (CAR) §15064.5. These evaluations[50,51,52] were conducted

[50] Ward Hill, 2001. op. cit.

[51] Urban Programmers, 1999. op. cit.

as part of the cultural resources assessment prepared for the proposed West Julian Revitalization Project. The development footprint of the West Julian Revitalization Project is nearly identical to that of the Brandenburg Mixed-Use Project. One area, however, is included in the proposed Brandenburg Mixed-Use Project that was not included in the *Draft Environmental Impact Report, West Julian Revitalization Project.*[53] That area is: the entire block bounded by the historical alignment of West Julian Street to the north, Devine Street to the south, Market Street to the east, and North San Pedro to the west. Another area that was included in the *Draft Environmental Impact Report, West Julian Revitalization Project* has been excluded from the current project. That area includes: properties bounded by the historical alignment of Devine Street to the north, St. James Street to the south, San Pedro Street to the east, and Pellier Park to the west.

Although the added area referenced above was not included in the *Draft Environmental Impact Report, West Julian Revitalization Project*, they were within the study area of the *Historic Resources Survey-Downtown San Jose Year 2000.*[54] That survey was undertaken to inventory existing historic resources within the San Jose Downtown Core area. All properties in the study area were site checked, and those buildings and structures at least 50 years old that had not been previously evaluated were subject to background research and numerical evaluation under the City of San Jose Historic Preservation Ordinance (13.118) and the Historic Evaluation Sheet.

Only one of the properties within the project area meet the criteria for historical resources, as defined by California Code of Regulations §15064.5. The property is 183 West St. James Street, "Pellier Park," a California Historical Landmark (#434) and a San Jose City Landmark (HL 77-3).

As part of the proposed project, Pellier Park will be expanded after the proposed reconfiguration of West Julian Street. In 2001, the San Jose Redevelopment Agency analyzed similar potential impacts to Pellier Park due to residential development and park expansion. This analysis determined that the park's expansion would: (1) greatly improve public enjoyment and appreciation the park's historic character due to newly-created park space and facilities that increase public access and use; and (2) improve the park's historic context by establishing a more cohesive feeling of open space associated with the Santa Clara Valley's horticultural past, a key element of the park's historical significance.[55]

The proposed project includes six actions designed to achieve project objectives. The actions are: (1) amendment of the City's General Plan for changes in land use, roadway designation, and Downtown Core Area boundaries; (2) public improvements including street realignments and associated traffic signals and sidewalks; (3) creation of an assessment district to finance street realignment; (4) acquisition, assembly, and disposition of parcels for development; (5) site clearance; and (6) mixed use development, which includes the proposed development, transportation/circulation/parking, parks and open space, and preliminary excavation and grading. Of these six actions, those that have potential to impact cultural resources include: (2) the realignment of Julian Street; (5) site clearance; and (6) mixed-use development. These project actions, as well as recommended mitigation measures that will reduce such impacts to less than significant levels, are described below.

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[52] Urban Programmers, 1999. *Cultural Resources Evaluation West Julian Street General Plan Amendment.*

[53] City of San Jose Redevelopment Agency, 2001. *Draft Environmental Impact Report, West Julian Revitalization Project, Volume I.*

[54] Dill Design Group, 2000. op. cit.

[55] City of San Jose Redevelopment Agency, 2001, op. cit., p. 135.

c. Less than Significant Cultural Resources Impacts. Several effects of the proposed project relate to cultural resources, but would not constitute significant adverse impacts.

(1) Site clearance. As part of the proposed project, all existing buildings in the project area south of Bassett Street would be demolished and removed, with the exception of the building located at 151 West St. James Street (APN 259-32-024), on the northwest corner of West St. James and North San Pedro Streets, which would not be affected. Additionally, buildings north of Bassett Street may be demolished and removed or may be adaptively reused as part of the redevelopment of the area.

The project area has been previously surveyed for buildings, structures, or sites that: (1) meet the eligibility criteria for consideration as historical resources, as defined by CAR §21084.1; (2) appear to be eligible for listing in the National Register; or (3) appear eligible for listing in the City of San Jose's Historic Resources Inventory as a Candidate City Landmark. The only building, structure, or site that meets the criteria for consideration as historical resources, appears eligible for listing in the National Register, or appears eligible for listing as a San Jose City Landmark is 183 West St. James Street (Pellier Park). Under the proposed Brandenburg Mixed-Use Project, 183 West St. James Street, Pellier Park, would benefit from the expansion and upgrade of park facilities included as a component of mixed-use development of the project area. The park is historically significant for its commemorative value as the site of Louis Pellier's nursery, rather than for any physical remains associated with the nursery.

As noted above, 151 West St. James Street is excluded from the project site, and therefore no direct impacts will occur as a result of site clearance.

Potential impacts to 151 and 183 West St. James Street that may occur due to other project actions are discussed in the next section detailing development-related, indirect impacts.

(2) Changes to the Historic Setting of 151 and 183 West St. James Street. Visual impacts to the setting of the building at 151 West St. James Street and the commemorative site at 183 West St. James Street have been considered. The *West Julian Revitalization Project DEIR* noted the potential impact of new development on the setting of these two cultural resources. The DEIR concluded that the urban environment surrounding these two cultural resources ". . .has been changing and evolving considerably during the last 50 years. 151 W. St. James street, the only remaining building on this block, is surrounded by a paved parking lot."[56] Although the change in immediate surroundings would result in a different scale of built environment, the historical character that marked the periods of significance of these cultural resources has already been greatly compromised by the lack of design continuity in buildings and structures constructed in the vicinity of the project area since World War II. As such, the steady pace of urban growth in San Jose has resulted in changes to project area street-scapes, and have dramatically changed the visual character of the architectural context. The visual impact of new development will not adversely effect what has already been compromised by prior development.

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[56] City of San Jose Redevelopment Agency, 2001. *Draft Environmental Impact Report, West Julian Revitalization Project, Volume II, Technical Appendices*, p. 10.

c. Significant Cultural Resources Impacts.

Impact CUL-1: Development of residential and commercial uses of the project site could adversely impact cultural resources. (S)

Significant impacts would result from three activities associated with construction and operation of the proposed project.

(1) Ground Disturbing Project Activities. As previously documented and described above, the project area has the potential to contain subsurface archaeological deposits associated with the prehistoric, ethnographic, and historical settlement and use of the Santa Clara Valley in general, and San Jose in particular. Since cultural resources along watercourses such as the Guadalupe River may have been buried by alluvial deposits, such resources may not be readily apparent during standard pedestrian archaeological surveys. As proposed, the project calls for the excavation of up to 9.2 million cubic feet of soil to accommodate underground parking facilities. Additionally, subsurface utilities, street improvements, storm drainage sewers, and other appurtenances require ground disturbance. Environmental and historical data suggest that there is a moderate to high likelihood that prehistoric and historic cultural resources exist within the project area, and may be encountered during construction period activities.

Mitigation Measure CUL-1a: A qualified archaeologist, meeting the Professional Qualifications Standards of the *Secretary of the Interior's Standards and Guidelines,*[57] shall monitor all ground disturbing activity within the project area. This monitoring shall continue until, in the archaeologist's judgment, a depth has been reached at which cultural resources are not likely to be encountered by project-related activities. If deposits of archaeological materials are encountered during project activities, all work within 50 feet of the discovery shall be redirected until the monitor has evaluated the finds and made recommendations regarding their disposition. If such cultural resources are found to be significant, in accordance with CEQA and the California Register, they should be avoided by project activities. If avoidance is not feasible, adverse effects to such resources shall be mitigated.

Prehistoric materials can include flaked-stone tools (e.g. projectile points, knives, choppers) or obsidian, chert, or quartzite toolmaking debris; culturally darkened soil (i.e., midden soil often containing heat affected rock, ash and charcoal, shellfish remains, and cultural materials); and stone milling equipment (e.g., mortars, pestles, handstones). Historical materials can include wood, stone, concrete, or adobe footings, walls and other structural remains; debris-filled wells or privies; and deposits of wood, glass, ceramics, and other refuse.

Project personnel shall not collect or move any cultural material. Fill soils that may be used for construction purposes shall not contain archaeological materials.

Upon completion of archaeological monitoring, a report shall be prepared documenting the methods, results, and recommendations of the monitoring archaeologist.

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[57] National Park Service, 1983. "Secretary of the Interior's Standards and Guidelines-Professional Qualifications Standards." Website: http://www.cr.nps.gov/local-law/arch_stnds_9.html.

(2) Structural Damage to the Building at 151 West St. James from Construction-Related Vibration. The *Draft Environmental Impact Report, West Julian Revitalization Project* (2001) identified potential impacts to the property at 151 West St. James Street due to construction-related vibration.[58] The proposed project calls for the development of residential and commercial uses, including below ground parking facilities, on four parcels located to the north, north-northwest, northwest, and west of the property at 151 West St. James Street (parcel designations L1/L2, K, J, and M). Heavy equipment operation and, if necessary, pile driving, may cause a significant adverse impact to the building at 151 West St. James Street if vibration resulting from these activities structurally damages or alters the building. (S)

Mitigation Measure CUL-1b: Prior to construction activities in parcels L1/L2, K, J, and M, a qualified structural engineer shall conduct a study of the building at 151 West St. James Street to identify any structural problems that may exist and that may be exacerbated by project-related vibration. If such structural problems are identified, a structural engineer, in conjunction with a qualified architectural historian meeting the professional qualifications standards of the Secretary of the Interior's Standards and Guidelines, shall develop a plan for the prevention or reduction of potential vibration damage to the building at 151 West St. James Street.

If no structural problems exist with the building at 151 West St. James Street, the structural engineer shall: (1) determine baseline limits to establish an acceptable range of vibration levels that may result from project-related construction; (2) install vibration sensors on the building at 151 West St. James Street before the start of project-related construction within the identified parcels (L1/L2, K, J, and M); and (3) monitor sensor data during project construction within the identified parcels to identify project-related vibration that exceeds the baseline limits.

If baseline vibration limits are exceeded due to project-related construction, all construction in parcels L1/L2, J, K, and M shall halt while a structural engineer determines if damage has occurred to the building. Damage could include, but would not be limited to, positional movement, loss of structural integrity, and loss of contributing decorative elements (e.g., decorative moldings or carved wood panels). If damage has occurred as a result of project activities, the source of the vibration shall be identified and removed, and an architectural historian shall then develop, in conjunction with structural engineers, a treatment plan for repairing the vibration damage and preventing further damage to elements of the building that contribute to its historical significance and integrity.

If a vibration damage treatment or prevention plan is required, the architectural historian shall prepare a report documenting the methods and findings of the plan. This report shall be submitted to the NWIC, the Director of Planning, Building and Code Enforcement, and the Historic Preservation Officer of the City of San Jose.

(3) Introduction of New Development Adjacent to or Nearby Significant Historical Resources. Because the proposed project does not include design information for any of the sites/buildings that could eventually fill the project area, issues such as specific heights, setbacks, building materials, colors, and landscaping, and their potential effect on nearby historic resources, can only be

[58] City of San Jose Redevelopment Agency, 2001. op. cit., p. 135.

generally addressed. The following mitigation measure will ensure that appropriate consideration is given to these issues at the time a specific development is proposed.

Mitigation Measure CUL-1c: Applications for development within the project area shall be referred to the Historic Landmarks Commission prior to approval.

(4) Disturbance of Human Remains, Including those Interred Outside of Formal Cemeteries. Given that the project area is sensitive for the presence of prehistoric archaeological sites, there is the potential for the discovery of human remains during construction activities.

Mitigation Measure CUL-1d: If human remains are encountered during construction, work within 50 feet of the discovery should be redirected and the County Coroner notified immediately. At the same time, an archaeologist should be contacted to evaluate the situation. If the human remains are of Native American origin, the Coroner must notify the Native American Heritage Commission within 24 hours of this identification. The Native American Heritage Commission will identify a Native American Most Likely Descendent to inspect the site and provide recommendations for the proper treatment of the remains and associated grave goods.

If human remains are encountered during construction, the archaeologist contracted to evaluate the situation should prepare a report documenting the methods and findings of the investigation. This report should be submitted to the NWIC. (LTS).

J. HAZARDS

This section describes the potential for hazardous materials[1] to affect human health and the environment at the project site. Several parcels within the project site are known to have released contaminants affecting soils and groundwater. There may be a potential for construction workers and future site workers and residents to come into contact with hazardous materials at the project site during and following project development.

Analysis of current conditions at the project site is based on a summary report for the project area[2] and included in Appendix F to this EIR. The information in the summary report has been updated, as necessary, from available environmental investigation and remediation reports and communication with persons involved in remedial activities at the project site.

1. Setting

a. Regulatory Framework. A myriad of laws and regulations at the federal, State, and local levels affect the management of hazardous materials. In California, the U.S. Environmental Protection Agency (U.S. EPA) has granted most enforcement authority over Federal hazardous materials regulations to the California Environmental Protection Agency (Cal EPA). In turn, two local agencies, the San Jose Fire Department (SJFD) and Santa Clara County Department of Environmental Health (SCCDEH), have been granted authority by the State to enforce most regulations pertaining to hazardous materials in the City of San Jose. A more detailed discussion of regulatory agencies and their jurisdiction is included in Appendix F of this EIR.

Oversight over investigation and remediation of sites affected by hazardous materials releases can be performed by State agencies, such as the Department of Toxic Substances Control (DTSC), regional agencies, such as the San Francisco Bay Regional Water Quality Control Board (RWQCB), or local agencies, such as SCCDEH or the Santa Clara Valley Water District (SCVWD). RWQCB has conducted oversight for hazardous materials investigations and remediation at and near the project site, and would be expected to be responsible for oversight of hazardous materials issues related to project development.

Remedial and investigative activities at the project site have taken advantage of the Polanco Redevelopment Act (California Health and Safety Code, section 33459, et seq.). The Polanco Act was enacted to encourage the safe reuse of potentially contaminated properties. The Act grants redevelopment agencies substantial discretion and authority in the cleanup process. The powers granted under the Act can allow a redevelopment agency to significantly speed up the investigation and remediation process of potentially contaminated properties, and provides mechanisms for recovery of the costs

[1] The California Health and Safety Code defines a hazardous material as, "...any material that, because of its quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety, or to the environment. Hazardous materials include, but are not limited to, hazardous substances, hazardous waste, radioactive materials, and any material which a handler or the administering agency has a reasonable basis for believing that it would be injurious to the health and safety of persons or harmful to the environment if released into the workplace or the environment." (California Health and Safety Code ' 25501)

[2] Brown and Caldwell, 2001, Summary of Hazardous Materials Issues Associated with Brandenburg/Northern Gateway Redevelopment Project, Memorandum from David Marrs to Cy Colburn, Legacy Partners Commercial, Inc., January 31.

incurred. Following successful assessment and remediation of a property under the provisions of the Act, developers and future land owners are no longer liable for future cleanup costs incurred as a result of historic contamination.

b. Hazardous Materials Setting. The existing setting at the project site and in the nearby vicinity is complex when the subject is hazardous materials. This section describes the hazardous materials setting by way of the five subsections that follow.

(1) Phase I Investigations. Historical land uses for the parcels comprising the project site were evaluated in several Phase I Environmental Site Assessments (ESAs) performed in 1999, 2000, and 2001. The Phase I ESAs included a site reconnaissance and review of available historical land use and regulatory agency records to identify potential hazardous material issues at project site parcels.

The Phase I ESAs determined that the project site has had a variety of uses dating back to the 1880s, primarily light industrial and commercial uses in the portion of the project site north of West Julian Street, and mixed residential and commercial land uses south of West Julian Street. Potential contaminants of concern identified during the Phase I activities are shown in Table V.J-1.

Table V.J-1: Historic Land Uses at the Project Site Potentially Associated with Hazardous Materials Use

Land Use	Hazardous Materials Potentially Associated with Land Use
Auto repair/wrecking	Petroleum products, solvents, heavy metals
Painting	Solvents, heavy metals
Manufacturing	Acids, solvents, heavy metals
Gasoline service station	Petroleum products, solvents
Railroad tracks	Heavy metals, polynuclear aromatic hydrocarbons, herbicides

Source: Baseline Environmental Consulting, 2003.

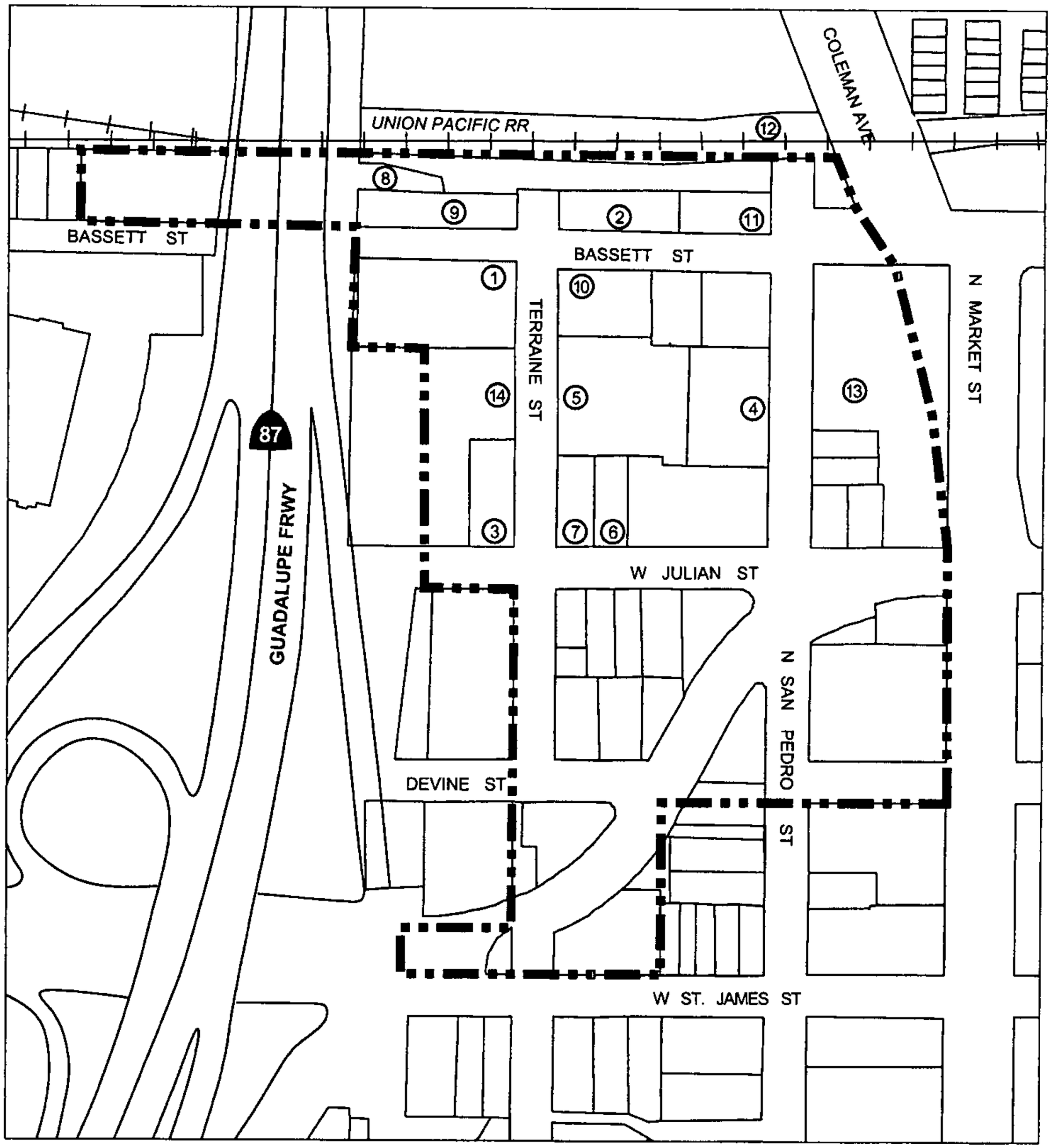
(2) Phase II Investigations. Based on identified historical land uses, properties at the project site with land uses potentially associated with hazardous materials were evaluated in Phase II investigations. The Phase II investigations included collection and analysis of soil and/or groundwater samples for contaminants of potential concern. Some of the Phase II investigations were related to remedial actions, such as removal of an underground petroleum storage tank (UST) or cleaning and closing of an oil-water separator (OWS).[3] Phase II activities for properties not requiring additional investigation and remediation are summarized in Table V.J-2. Site locations are shown in Figure V.J-1.

(3) Hazardous Materials Release Sites under Active Regulatory Oversight. Remediation activities for hazardous material releases at three of the properties at the project site are currently under regulatory oversight. Details of these sites are provided below.

i. ***153 West Julian Street***. This property, located within Parcel N, formerly contained a bicycle parts manufacturer. This property is being remediated under the oversight of the RWQCB. In accordance with RWQCB Order No. 99-088[4] (an update of a previous order issued in 1994), the

[3] Oil/water separators are commonly used at industrial sites to collect small releases of grease and other petroleum products from vehicles or heavy equipment. They are employed to prevent contaminants in runoff from being discharged to the storm or sanitary sewer systems.

[4] RWQCB, 1999, Order No. 99-088, Amendment of Site Cleanup Requirements (Order No. 94-027) for the Property Located at 153 West Julian Street, San Jose, Santa Clara County.



LSA

FIGURE V.J-1

① SEE TABLES V.J-2 AND V.J-3 FOR LOCATION INFORMATION

PROJECT BOUNDARY

N

0 100 200

FEET

Brandenburg Mixed Use Project/
North San Pedro Housing Sites
Locations of Properties with Historic or Current Hazardous Characteristics

SOURCE: CITY OF SAN JOSE, 2003.

I:\IMAGES\GRAPHICS\JOBS\SJO230 BRANDENBURG\FIGURES\FIG_VJ1.AI (08/15/03)

Table V.J-2: Summary of Properties at the Project Site with Historical Hazardous Material Use Where No Further Environmental Investigation or Remediation is Anticipated

Project Parcel	Map Parcel	Address (Property Owner)	Site Status
C	1	206 Bassett Street (Brandenburg)	Land use records show that agricultural chemicals were stored at this property, and a railroad spur was present near the property. Phase II activities did not identify significant releases of pesticides, PCBs, metals, or solvents. Localized, surface, release of petroleum hydrocarbons was identified, which was recommended to be managed during redevelopment activities. Site closed by RWQCB in April 2002. No additional investigation was recommended.
D	2	170 Bassett Street (Wayne)	Property was historically used as an automobile wrecking yard. Phase II investigation did not identify significant releases of petroleum hydrocarbons, metals, or pesticides.
G	3	201 West Julian Street (Brandenburg)	This property was historically used as a cooperage shop, an auto body shop, and a junkyard. Phase II activities did not identify significant releases of petroleum hydrocarbons, heavy metals, or pesticides.
N	4	345 North San Pedro Street (Brandenburg)	A 1,000-gallon waste oil UST was cleaned and closed in place. Case closed by RWQCB in March 2002.[b] One OWS was cleaned and closed in 2000.
P1	5	330 Terraine Street (Brandenburg)	Two USTs were removed from this site in 1985. Phase II investigation did not identify significant contamination in the UST area or in other areas at the property. Site closed by RWQCB in April 2002.[c] Three OWS were cleaned and closed in 2000.
K	15	160 W. Julian Street (Brandenburg)	This property was historically used as a gasoline station and for automobile repair. A 1,000-gallon gasoline and diesel UST was removed from this site. Case closed by RWQCB in March 2002. Three OWS were cleaned and closed in 2000. Additional sample results for lead in soil prepared for RWQCB in July 2003.
P1	6	175 West Julian Street (Brandenburg)	One OWS was cleaned and closed in 2000.
P1	7	185 West Julian Street (Brandenburg)	A 1,000-gallon heating oil UST was removed from this site. Site closed by RWQCB in March 2002.[d] One OWS was cleaned and closed in 2000.

Notes: OWS = Oil/water separator.
PCBs = Polychlorinated biphenyls.
RWQCB = San Francisco Bay Regional Water Quality Control Board.
UST = Underground petroleum storage tank.

[a] RWQCB, 2002d, Closure Letter for Property Located at 330 Terraine Street, San Jose, Santa Clara County, California, April 30.

[b] RWQCB, 2002a, Closure Letter for Property Located at 345 North San Pedro Street, San Jose, Santa Clara County, California, March 27.

[c] RWQCB, 2002d, op. cit.

[d] RWQCB, 2002c, Closure Letter for Property Located at 185 West Julian Street, San Jose, Santa Clara County, California, March 27.

Source: Baseline Environmental Consulting, 2003.

property is being remediated in accordance with an approved Remedial Action Plan (RAP) prepared for the site in August 1999.

An underground storage tank containing 1,1,1-trichloroethene (TCA), an industrial solvent, was used at the tank and had suffered releases during its operation. The UST and approximately 162 cubic yards of TCA-affected soils were removed from the site in July 1985. Soil vapor and groundwater extraction and treatment systems were installed at the site in 1988. Additional sampling data from a 1993 investigation indicated that volatile organic compounds (VOCs) were no longer present in soils at the site shallower than 12 feet below ground surface (bgs). Based on these data, the soil vapor extraction system was terminated. Groundwater data from the 1993 investigation showed that VOC contamination persisted in shallow groundwater, and the extraction and treatment system was expanded.

After the current RAP was prepared in 1999, groundwater in the shallowest aquifer (less than 35 feet bgs) within approximately 140 feet (downgradient) of the former UST continued to show contaminants above maximum contaminant levels (MCLs),[5] although groundwater in intermediate and deeper aquifers had not contained VOCs above MCLs in the past two monitoring events.[6]

A health risk assessment (HRA) was prepared in March 1999 to develop health risk-based remedial goals for the RAP. The HRA evaluated potential risks to future residents of a multi-family housing project at the site, who could potentially be affected by VOCs that have migrated from groundwater, through the soil and into indoor air.[7] Remedial goals were established to be protective of both human health and the environment.

Two alternative remedial measures were chosen in the RAP, depending on the future use of the property: (1) In the event that the site remained undeveloped, it was recommended that the groundwater extraction and treatment system then in place be continued; and (2) in the event that the site was to be redeveloped, excavation and disposal of soils affected by VOCs in areas where shallow groundwater is affected was recommended. The RAP estimated that should the second alternative be chosen, approximately 7,000 cubic yards of soils would require disposal at a Class I landfill. Groundwater monitoring wells would be installed and groundwater monitoring for approximately five years was anticipated to ensure that the remedial goals had been achieved.

A total of approximately 9,300 cubic yards of VOC-contaminated soils were removed from the site during excavation operations conducted between September 2002 and January 2003.[8] Backfill and site restoration activities were completed by June 2003. A remedial action completion report for this site had been prepared in June 2003, but had not yet been approved by RWQCB as of the date of preparation of this DEIR. A work plan for groundwater monitoring well installation and a groundwater

[5] MCLs are thresholds established by the State to protect drinking water quality. Although shallow groundwater underlying the project site is not proposed for use as drinking water, MCLs are often used as goals for groundwater remedial actions.

[6] Azure Environmental, 1999, Final Remedial Action Plan, 153 West Julian Street, San Jose, California, August 13.

[7] SOMA Corporation, 1999, Report Summarizing the Development of Human Health Risk-Based Groundwater Remedial Goals for the 153 West Julian Street Site, San Jose, California.

[8] Azure Environmental, 2003, Remedial Action Completion Report, 153 West Julian Street, San Jose, California, June.

monitoring program is proposed to be submitted to RWQCB during July 2003. That work plan will monitor the progress and effectiveness of natural attenuation of VOCs in shallow groundwater. The monitoring program is expected to take a maximum of three years, the amount of time that current modeling estimates predict will be necessary to reach final remedial goals.[9]

ii. ***129-149 West Julian Street***. This property, located within Parcel K, was formerly used for a gasoline service station until around 1970. Two USTs were closed in place at the site in 1987. Thirteen groundwater monitoring wells were installed at the site to evaluate the extent of petroleum hydrocarbon contamination at this site. The most recent monitoring results indicate TPH-g is present in groundwater at concentrations up to 4.2 milligrams per liter (mg/L), and benzene at up to 0.71 mg/L.

In October 2000, a Corrective Action Plan (CAP) for this property was approved by RWQCB. Similar to the RAP for the 153 West Julian Street property, the CAP included two remedial options: (1) Monitored natural attenuation (MNA), if the property was to remain undeveloped, and (2) excavation of hydrocarbon-affected soil and disposal at an off-site facility, if the property is proposed for redevelopment. Implementation of the CAP is expected to begin soon after remedial work at 153 West Julian Street property is completed.[10]

iii. ***355 North San Pedro Street***. This property, located within Parcel N, is the site of a petroleum hydrocarbon release discovered during removal of a UST in March 2000. Two investigations were performed to determine the extent of petroleum-affected soils and groundwater. Based on available data, petroleum contamination appears to extend to an adjacent property to the west (170 Bassett Street), and to the Bassett Street right-of-way to the north. A CAP proposing excavation of petroleum-affected soils, estimated to comprise approximately 100 cubic yards, has been proposed. RWQCB approved the CAP in February 2002.[11] Remedial action at this site will be undertaken following completion of remediation at the 129-149 West Julian Street property.[12]

(4) Sites Requiring Additional Environmental Investigation. Several potential hazardous materials issues at the project site identified during Phase I investigations have not yet been evaluated. Properties requiring additional environmental investigation are listed on Table V.J-3. For most of these properties, Phase II activities were not performed because access to the property was not made available. Additional investigation will be required to determine if significant hazardous materials releases have occurred at these sites.

(5) Lead and Asbestos in Building Materials. Prior to 1978, lead compounds were commonly used in interior and exterior paints. Prior to the 1980s, building materials often contained asbestos fibers, which were used to provide strength and fire resistance to the materials. Demolition or renovation of structures constructed prior to these dates has the potential to release lead particles and/or asbestos fibers to the air, where they may be inhaled by construction workers and the general

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[9] Fraticelli, Louis, 2003, consulting geologist, Arcadis, personal communication with Todd Taylor of Baseline Environmental Consulting, April 9.

[10] Ibid.

[11] RWQCB, 2002e, Corrective Action Plans - 355 North San Pedro Street and 206 Bassett Street, San Jose, Santa Clara County, California, February 6.

[12] Ibid.

Table V.J-3: Properties at the Project Site Requiring Additional Environmental Investigation

Project Parcel	Map Parcel	Property Address (Owner)	Site Status/Additional Work Required
A	8	229-249 Bassett Street (State of California)	Property was historically used for painting and maintenance shops. Heavy metals, petroleum products, and solvents are potential contaminants of concern.
	9	201-225 Bassett Street (Brandenburg)	Property has been occupied since the late 1800s and used for warehouse and waste paper bailing operations. Potential contaminants of concern include petroleum hydrocarbons and contaminants possible in fill materials that underlie the property.
B	10	199 Bassett Street (Trenka)	Property has been occupied since 1891 with a variety of commercial and industrial land uses. Petroleum products are potential contaminants of concern.
	11	361 North San Pedro Street (Leon)	Property has been used for commercial and light industrial uses. Additional field work was recommended to determine if sumps or other features of concern may be present at the property.
	12	Union Pacific Railroad Company Property	This property was historically used for railroad tracks. Potential contaminants of concern include metals and polynuclear aromatic hydrocarbons.
G	14	331-341 Terraine Street (State of California)	Phase II investigation recommended.

[a] Rous, Charlie, 2003, San Jose Redevelopment Agency, personal communication with Todd Taylor of Baseline Environmental Consulting, April 9.

Source: Baseline Environmental Consulting, 2003.

public. As practically all of the buildings at the project site were constructed prior to 1985, there may be lead and asbestos issues associated with demolition of existing buildings.

Lead is a suspected human carcinogen, a known teratogen (i.e., causes birth defects), and a reproductive toxin. Federal and State regulations govern the renovation and demolition of structures where lead or material containing lead are present. Regulations pertaining to demolition of structures with lead-based paint are promulgated by federal and State agencies.

Asbestos is a known human carcinogen. Federal, State, and local requirements also govern the removal of asbestos or suspected asbestos-containing materials, including the renovation and demolition of structures where asbestos is present. These requirements are promulgated by the federal and State agencies and the Bay Area Air Quality Management District (BAAQMD).

2. Impacts and Mitigation Measures

a. Criteria of Significance. The proposed project would have significant impacts relating to hazardous materials if it would:

- Create a significant hazard to the public or the environment as a result of routine transport, use, production, upset, or disposal of hazardous materials;

- Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment;
- Bring people into direct contact with hazardous materials on a listed hazardous materials site, compiled pursuant to Government Code section 65962.5;
- Create a significant hazard to the public or the environment from existing hazardous materials contamination by exposing future occupants or users of the site to contamination in excess of soil and groundwater cleanup goals developed for the site; or
- Impair the implementation or interfere with an emergency response or evacuation plan.

b. Less-than-Significant Impacts. Following construction of the project, the project would not result in the routine transport, use, or disposal of significant quantities of hazardous materials. The project would not interfere with an emergency response plan, and would not expose people to wild-land fire hazards. Electromagnetic fields (EMFs) onsite would be similar to other residential and mixed use projects throughout downtown San Jose. Implementation of the project would therefore have no significant impacts related to these potential concerns.

c. Significant Impacts. The Brandenburg Mixed Use Project would result in four significant adverse impacts related to hazardous materials.

Impact HAZMAT-1: Development of the project could expose construction workers and/or the public to hazardous materials from known residual soil and groundwater contamination or previously undiscovered contamination during construction activities. (S)

Environmental investigations have identified several properties at the project site where releases of hazardous materials have affected soils and shallow groundwater. Construction workers will have direct contact with soils and groundwater, and therefore may be exposed to contaminants in those materials via inhalation of dust and vapor, direct dermal contact, and/or accidental ingestion. Improper storage, handling, and disposal of these materials could increase potential risks to construction workers. Dust from contaminated soils could drift outside the immediate construction area and affect nearby workers and residents.

Potential hazardous materials issues at several of the project site properties have not been fully evaluated (see Table V.J-3, above, for details). If significant hazardous materials releases have occurred at those properties, construction workers and future workers and residents at the project site could be exposed to potentially harmful concentrations of hazardous materials.

There is also the potential for previously unknown contamination to be encountered during project development. The scopes of environmental investigations conducted at the project site were based on available historical land use information, such as aerial photographs, and evidence of historical hazardous material use apparent during site inspections. As hazardous material records were not required to be maintained during much of the developed history of the project site, there is a possibility that hazardous materials may have been used, stored, or disposed of in areas outside of the areas of concern identified during previous environmental investigations. Therefore, there is the potential for subsurface contamination from hazardous materials to be present at the project site, and such contamination may not currently be apparent, but could be encountered during construction activities. If present, this contamination could present a health risk to construction workers and future site users.

The following two-part mitigation measure is recommended.

Mitigation Measure HAZMAT-1a: Prior to the issuance of any grading, demolition, or building permits for the project, a Site Safety Plan/Soil and Groundwater Management Plan (Plan) should be prepared. At a minimum, the Plan should establish soil and groundwater mitigation and control specifications for grading and construction activities, including health and safety provisions for monitoring exposure to construction workers, procedures to be undertaken in the event that previously unreported contamination is discovered, and emergency procedures and responsible personnel. The Plan should also include procedures for managing soils and groundwater removed from the site to ensure that any excavated soils and/or dewatered groundwater with contaminants are stored, managed, and disposed of in accordance with applicable regulations.

Mitigation Measure HAZMAT-1b: Prior to the issuance of any grading, demolition, or building permits at properties where Phase I activities have identified a potential hazardous materials issue that has not yet been evaluated in a Phase II investigation, a subsurface investigation should be conducted at the project site by a qualified environmental professional, in accordance with recommendations in the Brown and Caldwell summary report.[13] Properties (and landowners) where the summary report recommended an additional Phase II investigation include:

- 229-249 Bassett Street (State of California)
- 201-225 Bassett Street (Brandenburg)
- 199 Bassett Street (Trenka)
- 361 North San Pedro Street (Leon)
- Union Pacific Railroad Company Property
- 331-341 Terraine Street (State of California)

If significant releases of hazardous materials are discovered during Phase II activities, additional investigation, remediation, and/or coordination with regulatory agencies may be required prior to redevelopment of the parcels.

Implementation of this three-part measure would reduce this impact to a less-than-significant level. (LTS)

Impact HAZMAT-2: Development at sites currently under remediation could expose future residents and workers to hazardous concentrations of contaminants and/or could hinder remedial activities. (S)

Three properties at the project site are currently under regulatory oversight: the 153 West Julian Street property, the 129-149 West Julian Street property, and the 355 North San Pedro Street property. Releases of hazardous materials with the potential to significantly affect human health and the environment have been identified at these properties.

[13] Brown and Caldwell, 2001, *op. cit.*

Should the properties be redeveloped prior to completion of remedial activities, future residents and workers could be exposed to potentially hazardous concentrations of contaminants. In addition, redevelopment of the properties for the proposed project could hinder remedial activities and the monitoring required to evaluate their effectiveness. Redevelopment following certification of the remedial actions would protect human health and the environment, as certification would require demonstration that remedial goals designed to protect human health and the environment have been met.

The following two-part mitigation measure is recommended to address the issue of timing between remediation and issuance of development-related permits.

Mitigation Measure HAZMAT-2a: Prior to the issuance of any permits for grading, demolition, or construction at the 153 West Julian Street property, the City shall require certification of completion of the remedial action required by RWQCB Order 99-088.

Mitigation Measure HAZMAT-2b: Prior to the issuance of permits for grading, demolition, or construction at the 129-149 West Julian and 355 North San Pedro properties, the City shall require certification of completion of the Corrective Action Plans for those sites by RWQCB.

Implementation of these measures would reduce this impact to a less-than-significant level. (LTS)

Impact HAZMAT-3: Improper use or transport of hazardous materials during construction activities could result in releases affecting construction workers and the general public. (S)

Construction activities proposed by the project may involve use and transport of hazardous materials. These materials could include contaminated soil and/or groundwater, former underground storage tanks, building demolition debris containing lead and asbestos, and fuels, oils, and other chemicals used during construction. Removal/relocation and transportation of hazardous materials could result in accidental releases or spills, potentially posing health risks to workers, the public, and environment.

Mitigation Measure HAZMAT-3: A Site Safety Plan/Soil and Groundwater Management Plan should be prepared, which will address emergency procedures and the management and disposal of contaminated soils and groundwater (see Mitigation Measure HAZMAT-1a, above). Use, storage, disposal, and transport of hazardous materials during construction activities shall be performed in accordance with existing local, State, and federal hazardous materials regulations. No additional mitigation is required.

Implementation of this measure would reduce this impact to a less-than-significant level. (LTS)

Impact HAZMAT-4: Demolition of any buildings containing lead-based paint and asbestos-containing building materials could release airborne lead and asbestos particles, which may affect construction workers and the public. (S)

If asbestos-containing materials and/or lead-based paint are present in structures planned for demolition or renovation, construction workers and nearby residents and workers could be exposed to asbestos fibers and lead-based paint dust during the demolition or renovation.

Mitigation Measure HAZMAT-4: As a condition of approval for any demolition or permit for a structure known or suspected to have been constructed prior to 1985, an asbestos and lead-based paint survey should be performed. If asbestos-containing materials are determined to be present, the materials should be abated by a certified asbestos abatement contractor in accordance with the regulations and notification requirements of the Bay Area Air Quality Management District. If lead-based paint are identified, then federal and State construction worker health and safety regulations should be followed during renovation or demolition activities. If loose or peeling lead-based paint are identified, they should be removed by a qualified lead abatement contractor and disposed of in accordance with existing hazardous waste regulations.

Implementation of this measure would reduce this impact to a less-than-significant level. (LTS)

K. PUBLIC FACILITIES AND SERVICES

This section describes the various public facilities and services within and in the vicinity of the project site and evaluates the impacts that would result from the implementation of the proposed project. Mitigation measures are recommended, where appropriate.

1. Setting

The following discussion of existing community facilities and services covers the following topics: police protection services; fire and emergency medical services; schools; libraries; and parks and recreation facilities. The information presented was gathered from a variety of sources, including the agencies and organizations that administer or provide the various public services.

a. Police Protection Services. The City of San Jose Police Department (SJPD) provides police protection services throughout the City. Officers patrolling the project vicinity are dispatched from Police Headquarters at 201 W. Mission Street. Currently, there are approximately 1,400 sworn officers in the SJPD force.[1]

The SJPD provides services within its jurisdiction to an area that consists of 83 beats, allocated to 16 districts. Beats are identified with a number and the districts are identified with a letter (e.g., N2). The project site is located within District E, Beat 2. There were a total of 1,442 reported crimes in Beat E2 in 2002. The top four incident types reported in Beat E2 include narcotics (213), drunk in public (177), traffic accident-non injury (151), and simple assault (107).[2]

The City has established a response time goal for police protection services of 6 minutes or less for 60 percent of Priority 1 calls (defined as involving immediate danger to life or property), and 11 minutes or less for 60 percent of Priority 2 calls (non-emergency situations).

b. Fire and Emergency Medical Services. Fire Protection, Rescue and Emergency Medical Services (EMS) within the San Jose corporate limits are provided by the City of San Jose Fire Department (SJFD), which serves a total of 206 square miles. SJFD responds to all fires, hazardous materials spills, and medical emergencies (including injury accidents) in the City of San Jose. The SJFD includes 31 fire stations located throughout the City, which house 31 engine companies, eight truck companies, three Urban Search and Rescue (USAR) companies, one Hazardous Materials Incident Team (HIT), five Battalion Chiefs, one Paramedic Supervisor, and one Arson Investigator. All of the 31 engine companies and 11 truck/USAR companies have a paramedic firefighter assigned on duty to provide advance life support (ALS) capabilities. Minimum staffing for each 24-hour duty shift includes 188 on-duty fire fighters, five Battalion Chiefs, one Paramedic Supervisor, and one Arson Investigator, a total of 195 on-duty fire protection personnel.[3] Five fire stations are located within 2 miles of the project site, as shown in Table V.K-1.

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[1] San Jose Police Department, 2003. About San Jose. Website: www.sjpd.org.

[2] San Jose Police Department. Crime statistics for annual year 2002. Anna LeGault, San Jose Police Department Crime Analysis Unit. March 13, 2003

[3] Acting Fire Chief Dale Foster, San Jose Fire Department. June 2003

Table V.K-1: Fire Station Location And Response Capability

Fire Station	Address	Distance from Project (Miles)	Response Capability
No. 1	255 Market Street	0.21	Engine, Truck, Battalion Chief
No. 30	454 Auzerais Avenue	1.41	Engine, Paramedic Supervisor
No. 7	800 Emory Street	1.51	Engine
No. 8	802 E. Santa Clara Street	1.60	Engine
No. 3	98 Martha Street	1.69	Engine, Truck

Source: Captain Keith Keesling, San Jose Fire Department. March 2003.

The City of San Jose also participates in several automatic aid programs with the Cities of Milpitas and Santa Clara and the Santa Clara County Fire Department. These automatic aid programs assign the closest responding first-due units, when available, in several designated areas in San Jose and the other participating jurisdictions, providing improved EMS and fire protection services to all participating jurisdictions.

The City of San Jose also participates in a Countywide Mutual Aid Program with many other fire agencies in Santa Clara County and the California Division of Forestry (CDF). Through this program, should any of the participating jurisdictions need additional assistance in a major emergency, and a significant portion of their own resources are committed to emergency operations, strike teams, composed of designated units from one or more of the program cities, would provide assistance to mitigate the emergency.

For the project site, the SJFD has a standard level of service for fire protection, rescue, and emergency medical services. For any building under four stories, the initial response includes two engines, one truck or USAR unit, and one Battalion Chief, with a minimum staffing of 14 firefighting personnel. An additional engine and Battalion Chief are included for emergency responses to reports of smoke or fire, for a minimum staffing of 24 firefighting personnel. For buildings with four or more stories, the standard initial first response would include two engine companies, two truck companies, and one Battalion Chief, with a minimum staffing of 19 firefighting personnel. When smoke or fire is reported, the emergency response would be upgraded to include five engines, three trucks, two USAR companies, the hazardous materials unit, one paramedic supervisor, one air unit, four Battalion Chiefs, and one Deputy Chief. This response level sends approximately 56 fire personnel to the initial response.

A travel time standard of 4 minutes for Fire Department first-due emergency response is incorporated in the San Jose 2020 General Plan (General Plan). The Citywide performance goal is that 80 percent of all emergencies be responded to within the standard 4-minute standard. The level of service set by the SJFD is based on average conditions (i.e., dry weather, time of day, traffic patterns, etc.) and is measured upon the arrival of the emergency response vehicle to the "curb." For Fiscal Year 2001-2002, the overall performance of the Fire Department for all emergencies was 68 percent within 4 minutes or less travel time, substantially lower than the Fire Department's goal of 80 percent. The Fire Department also has a standard for Total Reflex Time, which includes the time elapsed from the receipt of the initial "911" call, including dispatcher's call handling time, fire company turnout time, and travel time. Table V.K-2 presents the response time standards for medical calls and most fires (up to first alarms in buildings of less than four stories).

Table V.K-2: SJFD Response Time Standards for Medical Calls and Fires in Buildings of Less Than Four Stories

Response Unit	Station	Location	Distance From The Project (Mile)	Standard Travel Time (Minutes)	Standard Response Time (Minutes)	Approx. Travel Time (Minutes)	Estimated Total Reflex Time (Minutes)
First Due Engine	E1	255 N. Market Street	0.21	4.0	8.0	1.0	5.0
Second Due Engine	E30	454 Auzerais Avenue	1.41	6.0	10.0	4.0	8.0
First Due Truck/USAR	T1	255 N. Market Street	0.21	6.0	10.0	1.0	5.0
First Due Battalion Chief	BC1	225 N. Market Street	0.21	9.0	13.0	1.0	5.0
Third Due Engine	E3	98 Martha Street	1.69	9.0	13.0	5.0	9.0
Second Due Truck/USAR	73	98 Martha Street	1.69	11.0	15.0	5.5	9.5
Second Due Battalion Chief	BC10	511 S. Monroe Street	5.23	11.0	15.0	10.0	14.0

Source: Dale Foster, Acting Fire Chief, San Jose Fire Department, June 2003.

In Fiscal Year 2001-2002, Engine 1, the first responding unit, responded to 3,131 incidents and ranked 3rd busiest of the Fire Department's 31 engine companies. In the same year, the second response unit, Engine 30, responded to 2,033 incidents and ranked 16th busiest. Engine 3, the third response engine, responded to 2,631 incidents and ranked 7th busiest in Fiscal Year 2001-2002.[4]

c. Schools. The project site and vicinity are within the San Jose Unified School District (SJUSD), which served 32,351 students from Kindergarten to Grade 12 in 2002-2003.[5] The SJUSD is the largest school district in the City, consisting of 45 schools: 31 elementary schools, seven middle schools, and seven high schools. The SJUSD schools that would serve the project site are listed in Table V.K-3:

According to the SJUSD, Abraham Lincoln Senior High School is currently operating at capacity. Both Hester and Herbert Hoover have adequate capacity to accommodate additional students.

A student generation rate (SGR) is an estimate of the average number of students that would live in each dwelling unit. An SGR is employed to calculate anticipated student yields from new residential development. According to the SJUSD, single-family development generates 0.5 K-12 students per unit and multi-family development generates 0.20 K-12 students per unit.[6]

d. Libraries. San Jose provides library services to its residents through the San Jose Public Library System. Residents are currently served by the Dr. Martin Luther King, Jr. Main Library in the downtown area and a network of 17 neighborhood branch libraries distributed throughout the City. In addition, the San Jose Public Library system operates a bookmobile that stops at local schools, community centers, and other locations throughout the City. Of the 17 branch libraries, four are found within the vicinity of the project site: East San Jose Carnegie Branch Library, Dr. Martin Luther King, Jr. Main Library, Joyce Ellington Branch Library, and Rosegarden Branch Library.

[4] Ibid.

[5] Jonee McArthur, San Jose Unified School District Student Technician. March 2003

[6] Robert Gonzalez. Director of Student Assignment and Demographics. March 2003

Table V.K-3: SJUSD Schools Serving the Project Site

School	Location	2002-2003 Enrollment	Average Class Size	Pupil/ Teacher Ratio	At Or Exceeding Capacity
Hester Elementary School	1460 The Alameda, approximately 1.33 miles west	369	21.0	16.8	Not at Capacity
Herbert Hoover Middle School	1635 Park Avenue, approximately 2.20 miles west	1,101	26.7	20.6	Not at Capacity
Abraham Lincoln Senior High School	555 Dana Avenue, approximately 2.07 miles west	1,585	25.7	21.0	At Capacity

Source: Jonee McArthur, San Jose Unified School District Student Technician. March 2003.

In March of 2000, construction began on a new Joint City of San Jose/San Jose State University Library to be located at the corner of Fourth and San Fernando Streets in the downtown. On April 23, 2003, City and University officials announced that major construction on the project had been completed. A grand opening for the 475,000 square foot facility is tentatively set for late August 2003.[7]

In addition to the San Jose Public Library system, Santa Clara County also has a network of eight libraries within the County's municipalities, as well as a bookmobile. The Alum Rock Library, located at 75 S. White Road, is the only one in the County's system located in San Jose. University libraries are located at San Jose State University and San Jose City College. San Jose State University's facilities include Clark Library on its campus and the Special Collections Library on Senter Road. These facilities are open to San Jose State University faculty, staff, and students, as well as members of the community with purchased borrowing cards. In addition, a new joint library, developed by the partnership of the City, the Redevelopment Agency, the Public Library and San Jose State University, will open in 2003 at the southeast corner of 4th and San Fernando Streets. San Jose City College's libraries are only accessible to college faculty, students, and staff.

The City's *General Plan* sets a goal of 10,000 square feet of library space per 36,000 residents, 18.3 weekly service hours per 10,000 residents, and an annual acquisition rate of one volume per six residents (for up to the first 500,00 residents; one volume for every eight people above 500,000 residents). A representative of the libraries has said that the branch library system is currently inadequate to serve current needs due to recent population growth.[8]

A bond measure was passed in the November 2000 election which will add six new branch libraries over the next 10 years, based on recommendations of the September 2000 *Branch Facilities Master Plan: Building Neighborhood Libraries*.[9]

e. Parks and Recreation. The San Jose Department of Parks, Recreation, and Neighborhood Services oversees 208 parks totaling 3,748 acres,[10] and offers a variety of programs and services to

[7] Bartindale, Becky. "San Jose's Grand Library Nearing Completion", in San Jose Mercury News. April 24, 2003.

[8] Oback, Lorraine. Marketing Director, San Jose Public Libraries. July 2002.

[9] Ibid.

[10] This figure includes neighborhood, community, and regional park acres.

residents. The Department is also in charge of a network of 16 community gardens, 18 community centers, 11 senior centers, and ten youth centers throughout the City. Some of these facilities are provided in conjunction with, or are supplemented by, other public facilities, such as school sites.

There are numerous local and regional facilities in the vicinity of the project site. The closest neighborhood/community parks serving the project site are listed in Table V.K-4: Pellier Park, located within the project boundaries; Ryland Park, located approximately 0.4 mile north; McEnery Park, located approximately 0.5 mile south; St. James Park, located approximately 0.75 mile southeast; The Arena Green, located approximately 0.5 mile southwest; and Guadalupe River Park, located approximately 0.75 mile south.

The City's level of service measure for parks and recreation as specified in the *General Plan* is the provision of 3.5 acres of neighborhood/community serving park per 1,000 residents. Of the required 3.5 acres, a minimum of 1.5 acres should be neighborhood parks, community parks, and/or the neighborhood and community-serving elements of regional parks, and up to 2 acres can be school playgrounds/fields, all within a ¾ mile walking distance. The General Plan also sets a standard for community centers at 500 square feet of floor area per 1,000 population.

The Greenprint's goal is to provide at least one 40,000 square foot multi-service community center in each council district. Satellite community centers (10,000 to 20,000 square feet) will be provided to augment recreation programs and community services when needed to achieve the 2-mile service radius or meet specialized needs. In the case of high neighborhood need, smaller recreation buildings (1,000 to 10,000 square feet) may be used to provide specific recreation and neighborhood services.

The proposed project may construct up to 1,500 multi-family units, which would have a parkland obligation of 12.02 acres. The project is proposing the addition of an 0.86-acre park site to offset part of the parkland obligation along with the renovation of the 0.42 Pellier Park. The project can satisfy 50 percent of its parkland obligation under PIO, chapter 14.25 and/or PDO, Chapter 1938 of the San Jose Municipal Code (SJMC) by providing private recreational facilities in compliance with either chapter of the SJMC. Council District 3 has only 190 acres of neighborhood/community serving parkland at this time, the lowest number of parkland acres of any council district.

2. Impacts and Mitigation Measures

The following section evaluates impacts related to public facilities and services that could result from the implementation of the proposed project. The section begins with the criteria of significance, which establish the thresholds to determine whether an impact is significant and concludes with impacts of the project and mitigation measures, if required.

a. Criteria of Significance. Implementation of the proposed project would have significant impacts on public facilities and services if it would have the following effects:

- Result in an increased demand for police and fire services exceeding existing or planned staffing levels, facilities, or equipment;

Table V.K-4: Parks and Recreational Facilities Serving the Project Site

Park/Recreational Facility	Location
Pellier Park	Terraine and St. James Streets
Ryland Park	San Pedro and First Streets
McEnery Park	San Fernando Street and Guadalupe River
St. James Park	St. John and First Streets
The Arena Green	Santa Clara Street, Julian Street, and Autumn Street across from San Jose Arena
Guadalupe River Park	I-880 to the north, I-280 to the south along the Guadalupe River
Hester Elementary School	1460 The Alameda
San Jose Arena	525 W. Santa Clara Street
Tech Museum	201 S. Market Street
Plaza de Cesar Chavez	Market and San Carlos Streets
Center for Performing Arts	225 Almaden Boulevard
Children's Discovery Museum	180 Woz Way
San Jose Convention Center	150 W. San Carlos Street

Source: www.sjparks.org.

- Result in substantial adverse impacts associated with the provision of or need for new or physically altered school services and facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives;
- Substantially increase demand for neighborhood parks, regional parks, or recreational facilities that would accelerate their physical deterioration, or decrease the quality of the facilities or users' experience; or
- Result in the removal of a neighborhood park or open space area.

b. Less-than-Significant Impacts. The proposed project would create a small increase in demand for each of the public facilities and services addressed in this section. However, in each case, the extent of the increased draw on those facilities and services would be within the physical and financial capability of the provider.

The increased demand for police and fire services that would result from the introduction of the housing and commercial uses proposed for the site would not be so substantial as to exceed planned staffing levels, facilities or equipment. These services go through an annual budgeting process during which citywide priorities are established and service levels monitored. Generally speaking, the redevelopment of this neighborhood should lead to per-capita costs of providing these two services that would be less than those that would result from constructing the same number of units in one of the City's outlying neighborhoods.

While the proposed project would likely generate new students who would attend one of the three schools described above, State law (Government Code §65996) specifies the method by which a development project can offset its effect on the adequacy of school facilities: payment of a school impact fee prior to issuance of a building permit. In San Jose, a project applicant can either negotiate directly with the affected school district or they can make a "presumptive payment" of $1.93 per square foot for multi-family dwelling units. The school district is responsible for implementing the specific methods for mitigating school effects under the Government Code. The school impact fees

and the school district's methods of implementing measures specified by Government Code §65996 would offset project-related student enrollment.

The 1,500 units of the proposed project would add new population (approximately 3,435 persons)[11] to the downtown area and would provide approximately 0.86 acres of new parkland, leaving a shortfall of 11.16 acres when compared to the City's level of service benchmarks for neighborhood/community serving parklands. However, while the increased population of the proposed project would result in increased use of existing parks and trails, such use is not expected to be substantial enough to cause these facilities to deteriorate and no significant adverse physical impact would result.

Similar to the project's effect on parks and community centers, new residents would draw upon the resources of the City and County library system, which is described by a Library representative as being inadequate to serve current needs due to recent population growth. However, six new branch libraries are in the planning stages and would be partially funded out of proceeds from a bond measure that was passed in November 2000. No significant adverse physical impact would result.

c. Significant Impacts and Mitigation Measures. One significant adverse impacts related to public facilities and services would result from the proposed project.

Impact SVCS-1: The increasing traffic congestion that the downtown area will face in coming years could adversely affect the ability of both the Police Department and the Fire Department to respond in a timely manner to emergency calls. (S)

The following two-part mitigation measure would ensure that the potential public facilities and services impacts related to police and fire services would be reduced to a less-than-significant level.

Mitigation Measure SVCS-1a: The City shall continue to implement the following 2020 General Plan goals and policies that relate to public facilities and services:

- *Other Services Policy 18* – Fire service facilities should be located so that essential services can be most efficiently provided.
- *Fire Hazards Policy 2* – All new development should be constructed at a minimum, to the fire safety standards contained in the San Jose Building Code.
- *Fire Hazards Policy 3* – Anticipated fire response times and fire flow should be taken into consideration as part of the Development Review process.
- *Fire Hazards Policy 6* – New development should provide adequate access for emergency vehicles, particularly fire fighting equipment, as well as provide secure evacuation routes for the inhabitants of the area.

Mitigation Measure SVCS-1b: The City should implement a system of signal light preemption by emergency vehicles along key emergency response travel routes so as to expedite emergency through the Downtown Core Area. (LTS)

[11] Average household size for multi-family structures of 20 or more units was 2.29, based on Census 2000 data as presented on the City's website (www.ci.san-jose.ca.us/planning/sjplan/data/Census_2000).

L. HYDROLOGY AND FLOODING

This section describes the existing hydrological setting for the project site, including runoff, drainage, and water quality based on information available from the previous EIR prepared for the project site (the West Julian Revitalization project), City staff, and published reports. This section also identifies impacts that may result from project development, and suggests mitigation measures to reduce potential impacts.

1. Setting

a. Climate. The climate of the San Jose area is characterized as dry-summer subtropical (often referred to as Mediterranean), with cool wet winters and relatively warmer dry summers. The mean annual rainfall in the vicinity of the project site, for the period between 1948 and 2001, is approximately 14.5 inches.[1] Analysis of long-term precipitation records indicates that wetter and drier cycles lasting several years are common in the region. Severe, damaging rainstorms occur about once every three years.[2]

b. Runoff and Drainage. There are no creeks or streams crossing the project site, which is relatively flat and largely covered with impervious surfaces (buildings and pavement). A small portion of the site is vacant and unpaved. Most of the rainfall at the site encounters the impervious surfaces and flows overland into the City-maintained storm drainage system. Storm drain lines are located along North San Pedro Street, Devine Street, Terraine Street, Bassett Street, and Julian Street. Eventually, all the runoff from the site is discharged into the Guadalupe River, which is located approximately ½ mile west of the project site.

c. Flooding. The northwest portion of the project site is located within the 100-year flood hazard zone (Zone AH, Figure V.L-1), as mapped by FEMA.[3] Areas mapped within flood hazard Zone AH may be subject to shallow inundation (1-3 feet) during the 100-year (or greater magnitude) flood event. The 100-year flood has a 1 percent chance of occurring in any given year. The remaining portion of the project site is mapped as Zone D, areas of undetermined but possible flooding.

The site is not located within an identified dam failure inundation hazard area.[4] Flood water associated with a catastrophic dam failure at Anderson, Lexington, or Elsma reservoirs would flow several blocks west of the site, according to available mapping.

d. Coastal Hazards. The location of the project site (more than 10 miles from the southern portion of the San Francisco Bay) and the elevation of the site (approximately 80 feet NGVD) would protect the site from coastal hazards, such as tsunamis, extreme high tides, or sea level rise.

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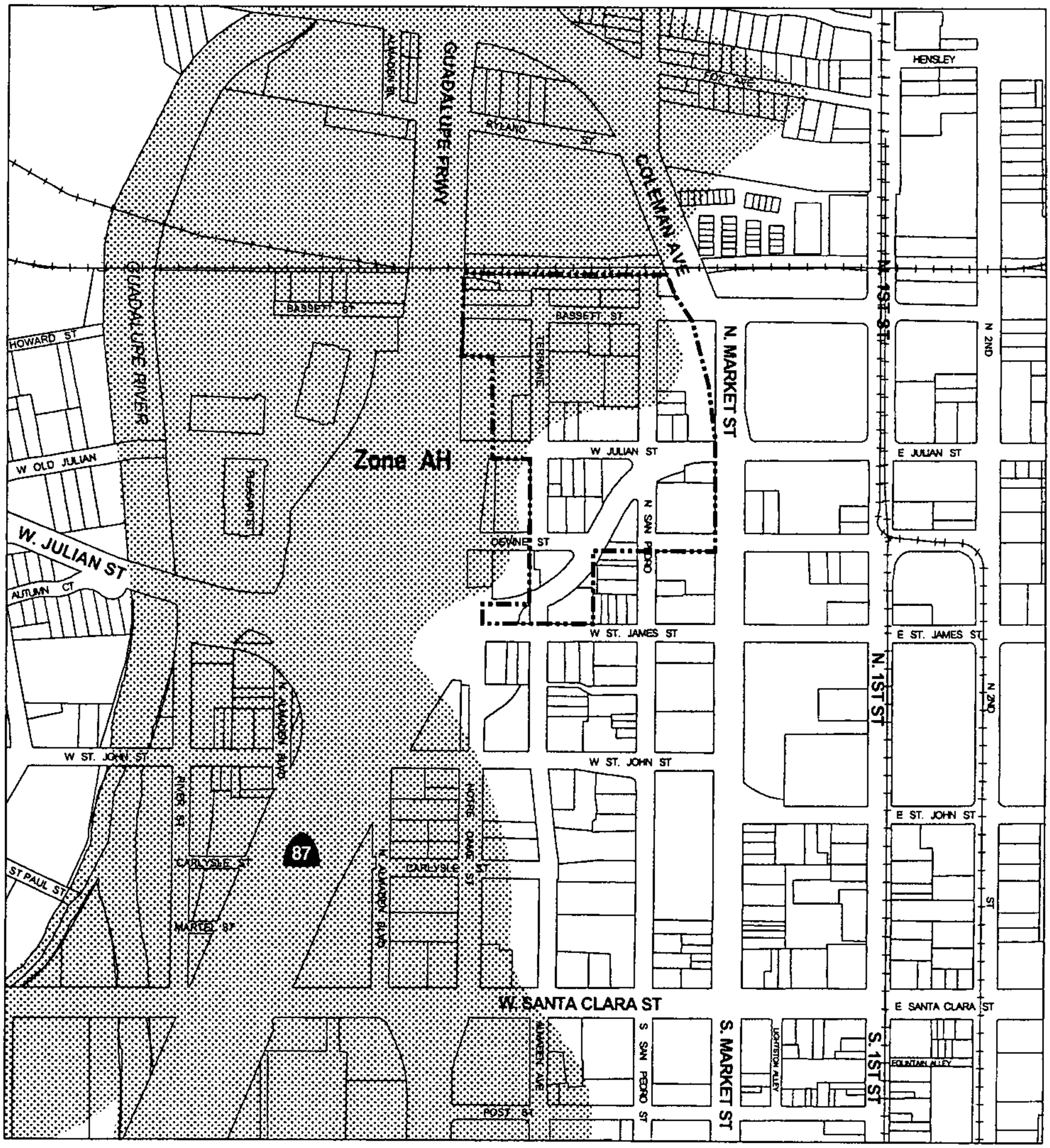
[1] Western Regional Climate Center, 2002, Website: http://www.wrcc.dri.edu/elimsmsfo.html

[2] Brown, William M. III, 1988, *Historical Setting of the Storm: Perspectives on Population, Development, and Damaging Rainstorms in the San Francisco Bay Region,* in Landslides, Floods, and Marine Effects of the Storm of January 3-5, 1982, in the San Francisco Bay Region, California, Stephen D. Ellen and Gerald F. Wieczorek, Eds., U.S. Geological Survey Professional Paper 1434.

[3] Federal Emergency Management Agency, 1982, Flood Insurance Rate Map (FIRM), City of San Jose, California, Community Panel Number 060349 0025 D, August 2.

[4] Association of Bay Area Governments website (http://www.abag.ca.gov)



LSA

FIGURE V.L-1

Brandenburg Mixed Use Project/
North San Pedro Housing Sites
Flooding Zone Map

LEGEND
PROJECT BOUNDARY
100-YEAR FLOOD ZONE

NOTE: SEE TEXT FOR DEFINITION OF ZONE AH

0 250 500
FEET

SOURCE: CITY OF SAN JOSE, OCTOBER 2002.

I:\IMAGES\GRAPHICS\JOBS\SJO230 BRANDENBURG\FIGURES\FIG_VL-1.AI (08/15/03)

e. Water Quality. The quality of surface water and groundwater in the vicinity of the project site is affected by past and current land uses at the site and within the watershed, as well as the composition of geologic materials in the vicinity.

Water quality in surface and groundwater bodies is regulated by the State and Regional Water Quality Control Boards. The San Francisco Bay Regional Water Quality Control Board (RWQCB) is responsible for implementation of State and Federal water quality protection guidelines for waterways located in the vicinity of the project site. The RWQCB implements the Water Quality Control Plan (Basin Plan),[5] a master policy document for managing water quality issues in the region. The Basin Plan establishes beneficial water uses for waterways and water bodies within the region.

No streams or rivers cross the site. However, the Guadalupe River flows about ½-mile away and is the receiving surface water body for drainage from the site. The designated beneficial uses for the Guadalupe River include noncontact water recreation, warm freshwater habitat, and wildlife habitat. The Guadalupe River is designated as "impaired" by the RWQCB for diazinon with stormwater listed as the potential source under the Clean Water Act Section 303(d).[6]

Beneficial uses of groundwater for the Santa Clara County (Coyote Creek) aquifer include municipal and domestic water supply, industrial service, and agricultural water supply.

Runoff water quality is regulated by the Federal National Pollution Discharge Elimination System (NPDES) Nonpoint Source Program (established through the Clean Water Act); the NPDES program objective is to control and reduce pollutants to water bodies from nonpoint discharges. The Program is administered by the California Regional Water Quality Control Boards. The project site would be under the jurisdiction of the San Francisco Bay RWQCB with respect to construction runoff and the City of San Jose with respect to post-construction runoff, through the stormwater NPDES permit issued to the City as a participant in the Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP). City compliance with the NPDES Permit is mandated by State and Federal laws, statutes, and regulations.

Recent changes to the SCVURPPP permit are detailed in RWQCB Revised Order 01-024 (NPDES Permit No. CAS029718). Revisions that potentially apply to the proposed project include Provision C.3, which specifies that significant development or redevelopment projects must include post-construction stormwater controls, meeting specific hydraulic sizing design criteria, unless it is impracticable to meet the sizing criteria; and the project includes an alternative methods for treating an equivalent pollutant loading or quantity of stormwater runoff, or provides another equivalent water quality benefit. Beginning in October 2003, a significant redevelopment project is defined as a project on a previously developed site that results in the addition or replacement of impervious surfaces that combine to a total 43,560 square feet or more.

[5] San Francisco Bay Regional Water Quality Control Board, 1995, *Water Quality Control Plan*, 21 June.

[6] State of California, Regional Water Quality Control Board, San Francisco Bay Region, 1998, Section 303(d), Clean Water Act, Impaired Water Body Lists.

The following excerpts from the RWQCB Revised Order 01-024 (NPDES Permit No. CAS029718) apply to the proposed redevelopment project (in this case the "discharger" referred to in the text is the City of San Jose):

- Environmental documents required for those projects that fall under CEQA or NEPA review, such as EIRs, negative declarations, and initial study checklists, shall address stormwater quality impacts during the life of the project (both significant and cumulative), required permits, and specific mitigation measures related to stormwater quality.
- Each Discharger, to the maximum extent practicable, shall require developers of projects with significant stormwater pollution potential to mitigate stormwater quality and volume impacts, through proper site planning and design techniques and/or addition of permanent post-construction stormwater treatment control measures ("treatment controls").
- Where more than fifty percent of a redevelopment project site is being replaced, the entire project site must meet specified hydraulic sizing criteria for the treatment of stormwater runoff, unless it is impracticable to meet the criteria; and the project includes an alternative method for treating an equivalent pollutant loading or quantity of stormwater runoff, or provides another equivalent water quality benefit.
- Each Discharger shall require developers of projects that include installation of permanent structural stormwater controls to establish and provide a method for operation and maintenance of such structural controls.

Projects disturbing more than 1 acre of land[7] during construction are required to file a Notice of Intent (NOI) with the SWRCB to be covered under the State NPDES General Construction Permit for discharges of storm water associated with construction activity. A developer must propose control measures that are consistent with the State General Permit. A Storm Water Pollution Prevention Plan (SWPPP) must be developed and implemented for each site covered by the general permit. A SWPPP should include Best Management Practices (BMPs) designed to reduce potential impacts to surface water quality through the construction and life of the project.

f. San Jose 2020 General Plan and Adopted City Council Policies. One City of San Jose Council Policy and eight key General Plan policies specifically address hydrology and storm drainage.

[7] The State Water Resources Control Board, Water Quality Order 99-08-DWQ, National Pollutant Discharge Elimination System (NPDES), General Permit for Storm Water Discharges Associated with Construction Activity (General Permit) states that:

> The regulations provide that discharges of storm water to waters of the United States from construction projects that encompass five (5) or more acres of soil disturbance are effectively prohibited unless the discharge is in compliance with an NPDES Permit. Regulations (Phase II Rule) that became final on December 8, 1999 expand the existing NPDES program to address storm water discharges from construction sites that disturb land equal to or greater than one (1) acre and less than five (5) acres (small construction activity). The regulations require that small construction activity, other than those regulated under an individual or Regional Water Quality Control Board General Permit, must be permitted no later than March 10, 2003 (http://www.swrcb.ca.gov/stormwtr/docs/finalconstpermits120602.pdf).

- Post-Construction Urban Runoff Management Policy: This Council Policy establishes that all new development projects incorporating 5,000 square feet or more of new building rooftop or paved area, or 25 or more uncovered parking stalls are required to include specific measures for improving the water quality of urban runoff to the maximum extent feasible. In addition, the Policy establishes general guidelines and best management practices for particular land uses, and requires that all post-construction treatment control measures be maintained to operate effectively.
- Water Resources Policy 7: The City shall require the proper construction and monitoring of facilities storing hazardous materials in order to prevent contamination of the surface water, groundwater and underlying aquifers. In furtherance of this policy, design standards for such facilities should consider high groundwater tables and/or the potential for freshwater or saltwater flooding.
- Water Resources Policy 8: The City should establish policies, programs, and guidelines to adequately control the discharge of urban runoff and other pollutants into the City's storm drains.
- Water Resources Policy 9: The City should take a proactive role in the implementation of the Santa Clara Valley Urban Runoff Pollution Prevention Program.
- Water Resources Policy 10: The City should encourage more efficient use of water by promoting water conservation and the use of water-saving devices.
- Water Resources Policy 11: The City should promote the use of reclaimed water when feasible, particularly for industrial users, for irrigation and in groundwater recharge areas.
- Water Resources Policy 12: For all new discretionary development permits for projects incorporating large paved areas or other hard surface areas (e.g., building roofs), or major expansion of a building or use, the City should require specific construction and post-construction measures to control the quantity and improve the water quality of urban runoff.
- Bay and Baylands Policy 5: The City should continue to participate in the Santa Clara Valley Urban Runoff Pollution Prevention Program and take other necessary actions to formulate and meet regional water quality standards which are implemented through the National Pollution Discharge Elimination System Permits and other measures.
- Flooding Policy 1: New development should be designed to provide protection from potential impacts of flooding during the "1 percent" or "100-year"flood.

2. Impacts and Mitigation Measures

This section outlines potential hydrology and water quality impacts and recommends mitigation measures. Less-than-significant impacts to hydrology and water quality are listed first, followed by significant impacts.

a. Significance Criteria. According to Appendix G of the *CEQA Guidelines*, the proposed project would have a significant impact on water if it would cause substantial flooding, erosion, or siltation; substantially degrade water quality; contaminate a public water supply; substantially degrade or deplete groundwater resources; or interfere substantially with groundwater recharge. For the purposes of this project, a hydrology and flooding impact is considered significant if the project will:

- Violate any water quality standards or waste discharge standards set by the Regional Water Quality Control Board (RWQCB) or otherwise substantially degrade surface or groundwater quality;
- Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that the local groundwater table would be lowered;

- Substantially reduce the amount or quality of water otherwise available for public water supplies;
- Create or substantially contribute to runoff water which would exceed the capacity of existing or planned stormwater drainage systems or create an increase in calculated peak flood discharges;
- Place within a 100-year flood zone hazard area structures which would impede or redirect flood flows;
- Increase the risk of flood-related property loss or hazard to human life from the 100-year flood hazard zone, as defined by FEMA, or from levee or dam failure;
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site; or
- Place housing within a 100 year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map.

b. Less-than-Significant Impacts. Development of the proposed project would not contribute to depletion of groundwater supplies or reduce the amount or quality of water available for public water supplies. The proposed project does not propose development that would substantially alter a natural watercourse. The amount of impervious surfaces would not be substantially altered. The project would convert two currently unpaved parcels, A and G, to impervious surfaces, while two currently paved/impervious parcels, P1 and P2, would be converted to unpaved parks. Implementation of the proposed project would not expose people or property to flooding associated with seiches or tsunamis.

c. Significant Impacts. Four potentially significant impacts are evaluated below. With implementation of each recommended mitigation measure, these impacts would be reduced to less than significant levels.

Impact HYD-1: Construction activities and post-construction operation of the project could result in degradation of water quality in the Guadalupe River and the Bay by reducing the quality of storm water runoff. (S)

(1) Construction-Period Impacts. Construction and grading within the project site would require temporary disturbance of surface soils and removal of vegetative cover. Over 9 million cubic yards of soil would be excavated from the project site as part of the construction of below-ground parking. During the construction period, grading and excavation activities would result in exposure of soil to runoff, potentially causing erosion and entrainment of sediment in the runoff. Soil stockpiles and excavated parcels on the project site would be exposed to runoff and, if not managed properly, the runoff could cause erosion and increased sedimentation in water courses at or away from the project site. The accumulation of sediment could result in blockage of flows, potentially resulting in increased localized ponding or flooding.

The potential for chemical releases is present at most construction sites. Once released, substances such as fuels, oils, paints, and solvents could be transported to nearby surface waterways and/or groundwater in storm water runoff, wash water, and dust control water, potentially reducing the quality of the receiving waters.

(2) Operation-Period Impacts. To facilitate any possible redevelopment of this project site, the Agency developed a Remedial Action Plan in conjunction with the Regional Water Quality Board. As part of these remedial efforts, a total of approximately 9,300 cubic yards of volatile organic compound impacted soil, approximately 2,085 cubic yards of petroleum hydrocarbon impacted soil, and approximately 2 cubic yards of lead impacted soil have been excavated and removed. Additionally, approximately 5,162,840 gallons of volatile organic compound impacted groundwater have been remediated at the project site.

The project proposed in this EIR would further improve the water quality at the site by converting its land use from Industrial/Commercial uses to Residential Support for the Urban Core Area. This change in land use signifies a substantial reduction in potential surface water pollutants for the site. While more vehicles may be at the site due to its increased density, the vehicles will be cars, not industrial trucks. In addition, the project would be built within .14 miles of a rail station providing the opportunity for fewer vehicular trips. Most significantly, the current surface parking which can contribute to fuel leaks, lubricants, tire wear, and fallout from exhaust contribute petroleum hydrocarbons, heavy metals, being transported to receiving waters will be converted to underground parking eliminating this type of runoff. In addition, the potential for an increase in peak run-off flow is minimal to nonexistent because this is an infill project which will be constructed within a highly developed watershed. Therefore, the likelihood of increased erosion or other impacts is minimal.

The design of the project has not been fully developed and therefore, it is not possible to determine whether the hydraulic sizing requirements would apply. It appears, however, that this project would provide water quality benefits, as set forth above, and would not exceed the storm water impacts of the existing property. Therefore, the treatment and peak run-off flow requirements of Provision C.3 would not apply.

> Mitigation Measure HYD-1: The applicant shall prepare a Storm Water Pollution Prevention Plan (SWPPP) designed to reduce potential impacts to surface water quality through the construction and life of the project. The SWPPP would act as the overall program document designed to provide measures to mitigate potential water quality impacts associated with implementation of the project. The SWPPP shall include:
>
> - **Specific and detailed BMPs designed to mitigate construction-related pollutants.** These controls shall include practices to minimize the contact of construction materials, equipment, and maintenance supplies (e.g., fuels, lubricants, paints, solvents, adhesives) with storm water. The SWPPP shall specify properly designed centralized storage areas that keep these materials out of the rain.
>
> An important component of the storm water quality protection effort will be the education of the site supervisors and workers. To educate on-site personnel and maintain awareness of the importance of storm water quality protection, site supervisors shall conduct regular tailgate meetings to discuss pollution prevention. The frequency of the meetings and required personnel attendance list shall be specified in the SWPPP.
>
> The SWPPP shall specify a monitoring program to be implemented by the construction site supervisor, and must include both dry and wet weather inspections. City of San Jose and RWQCB personnel may make unannounced site inspections and are empowered to levy

considerable fines if it is determined that the SWPPP has not been properly prepared and implemented.

Best Management Practices (BMPs) designed to reduce erosion of exposed soil may include, but are not limited to: soil stabilization controls, watering for dust control, perimeter silt fences, placement of hay bales, and sediment basins. The potential for erosion is generally increased when grading occurs during the rainy season, as disturbed soil can be exposed to rainfall and storm runoff. If grading must be conducted during the rainy season, the primary BMPs selected shall focus on erosion control, that is, keeping sediment on the site. End-of-pipe sediment control measures (e.g., basins and traps) shall be used only as secondary measures. Access to and egress from the construction site shall be carefully controlled to minimize off-site tracking of sediment (this BMP is particularly important since much of the earthwork will involve loading trucks for off-site transport of soil excavated or the below-ground parking structures). Vehicle and equipment wash down facilities shall be designed to be accessible and functional both during dry and wet conditions.

- **Measures designed to mitigate post construction-related pollutants.** The project shall include measures designed to mitigate potential water quality degradation of runoff from all portions of the completed development, including roof and sidewalk runoff. The final design team for the project should review *Start at the Source*, Design Guidance Manual for Stormwater Quality Protection.[8] The selected permanent stormwater treatment measures may include biofilters and grassy swales; and the selected measure must meet the hydraulic sizing criteria specified in the most current NPDES municipal stormwater permit issued to the City of San Jose, unless the developer demonstrates that it is impracticable to meet the criteria; and the project includes an alternative method for treating an equivalent pollutant loading or quantity of stormwater runoff, or provides another equivalent water quality benefit.

Implementation of this mitigation measure would reduce this impact to a less-than-significant level. (LTS)

Impact HYD-2: Portions of the project site are located in the 100-year flood hazard zone and could be inundated during extreme storm events, potentially flooding below-ground parking structures. (S)

All or part of parcels A, B, C, D, E, F, G, H, N, and P1 are located in the FEMA 100-year flood hazard zone (Zone AH). These parcels, with the exception of P1, are proposed to be developed with a mix of high-density residential and commercial use with below-ground parking. Parcels A, B, C, and D are proposed as exclusively residential. During an extreme storm event these parcels may be inundated with flood waters and the below-ground parking facilities could be flooded, endangering people and property.

Mitigation Measure HYD-2: All structures shall be built so that potential injuries to project occupants and property damage are minimized in the event of a flood. Specifically, and in accordance with the San Jose Municipal Code, Title 17, Chapter 17.08, the lowest finished

[8] Bay Area Stormwater Management Agencies Association, 1999, Start at the Source, Design Guidance Manual for Stormwater Quality Protection

floor of each structure shall be elevated to or above the inundation elevation specified on the Flood Insurance Rate Map. In addition, below-ground parking structures shall be designed and constructed so that the base flood would not inundate these areas. Flood protection of below-ground parking could be achieved either by grade control and/or berms.

Note: Below grade parking is only allowed in FEMA 100-year flood hazard zones if the structure above the below grade parking is 100 percent non-residential (in use) or mixed use (residential and non-residential). This project is 100 percent residential (in use) and the outcome of the upcoming Santa Clara County Water District (SCVWD) Interim Designation Letter of Map Revision from Zone AH to Zone A99 will determine if any below grade parking will be allowed.

This mitigation measure would reduce this impact to a less-than-significant level. (LTS)

Impact HYD-3: The below-ground parking structures associated with the residential-only development proposed for parcels A, B, C, and D would not comply with the City Special Flood Hazard Regulations. (S)

The San Jose Municipal Code, Title 17, Special Flood Hazard Regulations are designed to protect people and property from flood hazards. Section 17.08.350 states that "no building permit shall be issued unless the building official determines that the proposed construction....if proposed residential construction in zones other than AO or A as shown on the flood insurance rate map, has the lowest floor, including basement, elevated to or above the base flood elevation." Therefore, the residential-only development proposed for parcels A, B, C, and D would not comply with this regulation, given the current delineation of the flood hazard area in the FEMA 100-year flood mapping. The City of San Jose will not support a waiver of City Special Flood Hazard Area requirements for the below grade parking proposed under exclusively residential structures. However, mixed-use commercial and residential buildings are allowed in Zone AH as long as commercial use occupies the first floor and the remaining provisions of 17.08.350(9) are met.

It is believed that the Guadalupe River Flood Protection Project from the Alviso Marina to Interstate 280 at Grant Street (currently a fully funded project and under construction) will ultimately result in the remapping of the FEMA Special Flood Hazard Zone (within this area) and the project site would no longer be within FEMA Flood Zone AH (100-year flood zone). Current plans by the Santa Clara Valley Water District (SCVWD) call for the Guadalupe River Flood Protection Project to be completed in December 2004. When that project is completed, the SCVWD, with the support of the City of San Jose, will file for a full Letter of Map Revision (LOMR) to remove significant portions of San Jose (including the project site) from the FEMA 100-year flood zone. Due to the significant amount of detail involved with this full LOMR, the SCVWD will not complete the full LOMR application until December 2005. However, in anticipation that the full LOMR will be approved by FEMA and these areas removed from the 100-year flood hazard zone, the SCVWD will also file an Interim Designation LOMR application to revise the flood zone from Zone AH to Zone A99. Zone A99 is defined as an "Area of special flood hazard where enough progress has been made on a protective system, such as dikes, dams, and levees, to consider it complete for insurance purposes." Designation as Zone A99, which carries no elevation requirement, is possible for fully funded projects that are 50% complete. This redesignation from AH to A99 is projected to be filed and approved by FEMA by August 2004.

Two potential mitigation measures are recommended below. Implementation of either one would adequately reduce this impact to a less-than-significant level.

Mitigation Measure HYD-3a: The proposed residential-only use for parcels A, B, C and D shall be allowed only after designation as Zone A99 by FEMA, which carries no elevation requirement in anticipation of a pending map change to the existing floodplain and after adoption of the Zone A99 designation into the City of San Jose's Special Flood Hazard Ordinance, flood proofing requirements shall be in accordance with the ordinance. Otherwise only commercial uses shall be allowed on the ground floor with flood proofing per City of San Jose Special Flood Hazard Ordinance requirements. (LTS)

or

Mitigation Measure HYD-3b: No building permit shall be issued for the proposed construction on parcels A, B, C and D prior to designation as Zone A99 of these parcels by FEMA and adoption of the Zone A99 designation into the Special Flood Hazard Ordinance or the approval of a Letter of Map Revision by FEMA that shows that the specified parcels are no longer in the FEMA 100-year flood hazard zone. (LTS)

Impact HYD-4: Dewatering effluent may contain contaminants and if not properly managed could cause impacts to construction workers and the environment. (S)

Dewatering operations may be required during the excavation for, and construction of, the below-ground parking facilities. There are two general classes of pollutants that may result from dewatering operations: sediment and chemical compounds (including toxics and petroleum hydrocarbons). High sediment content in dewatering discharges is common because of the nature of the operation in which soil and water mixes in the turbulent flow of high volume pump intakes. Chemical pollutants are most commonly found in dewatering effluent in areas with a history of groundwater contamination (e.g. leaks to the subsurface from industrial sites). Much of the project site is located in an area of confirmed historic chemical releases (refer to Chapter V.J, Hazards, for discussion of identified areas of potential subsurface contamination). Direct discharge of dewatering effluent to the storm drainage system could result in water quality impacts to downstream drainages and the Bay.

Mitigation Measure HYD-4: The SWPPP shall include provisions for the proper management of dewatering effluent. At minimum, all dewatering effluent will be contained prior to discharge to allow the sediment to settle out, and filtered, if necessary, to ensure that only clear water is discharged to the storm or sanitary sewer system. In areas of suspected groundwater contamination (i.e., underlain by fill or near sites where chemical releases are known or suspected to have occurred), groundwater will be analyzed by a State-certified laboratory for the suspected pollutants prior to discharge. Based on the results of the analytical testing, the applicant will work with the RWQCB and/or the local wastewater treatment plant to determine appropriate disposal options.

Implementation of this mitigation measure would reduce this impact to a less-than-significant level. (LTS)

M. UTILITIES AND INFRASTRUCTURE SERVICE SYSTEMS

This section describes the various utilities and service systems serving the project site and evaluates the impacts that would result from the implementation of the proposed project. Mitigation measures are recommended, where appropriate.

1. Setting

The following discussion of existing utilities and infrastructure service systems covers the following topics: electricity, natural gas, and telephone service; water supply; sanitary sewer service and waste-water treatment; storm drainage; and solid waste. The information presented was gathered from a variety of sources, including utility operators and service providers.

a. Electricity, Natural Gas, and Telephone Service. The Pacific Gas and Electric Company (PG&E) provides natural gas and electricity services to the City, including the project site, from a variety of renewable and non-renewable sources both within and outside of the State. Within the City's boundaries, there are a number of facilities that produce and transmit power throughout the City. Currently, there are six power plants within City limits and the new Metcalf power plant is being constructed in the southeastern area of San Jose near Metcalf Road and Monterey Highway. The Metcalf Energy Center is expected to be online in 2004.[1] It is anticipated that adequate electricity and natural gas service infrastructure will be available to serve the project site.

SBC Communications Inc. provides telecommunication service to the project site.

b. Water Supply. A description of existing conditions related to water sources, storage, and retail providers; conservation; and recycling is presented below.

(1) Water Sources, Storage, and Retail Providers. A portion of San Jose's drinking water is supplied via a local water supply system in which runoff is collected in reservoirs and later recharged in streams and ponds to augment the natural recharge of the ground water basin. Ten reservoirs, with a total storage capacity of 169,415 acre-feet (AF), store runoff from local watersheds. Local resources are not sufficient to meet all of the City's water supply needs. As a result, the Santa Clara Valley Water District (SCVWD) and water retailers import about one half of the water consumed within the City, mainly from three sources: the State Water Project via the South Bay Aqueduct; the San Francisco Water Department's Hetch Hetchy Aqueduct; and the San Felipe Division of the Federal Central Valley Project.

The SCVWD owns and operates an extensive distribution system and three water treatment plants: Penitencia (42 mgd capacity), Rinconada (75 mgd capacity), and Santa Teresa (100 mgd capacity).[2] These treatment plants recharge and treat both local and imported water. The total amount of water available to the SCVWD is approximately 646,900 AF during wet periods and 344,400 AF during critically dry periods.[3] The projected district-wide water demand for the year 2020 ranges between 350,000 AF and 500,000 AF.[4] The *Integrated Water Resources Plan* estimates a 100,000 acre-foot

[1] Calpine Corporation website: www.metcalfenergycenter.com.

[2] Santa Clara Valley Water District, 2001. *Urban Water Management Plan*. April.

[3] Santa Clara Valley Water District, 1997. *Integrated Water Resources Plan*.

[4] *Ibid*.

shortfall by the year 2020 and has developed strategies to fill the gap created by this shortfall through conservation, water banking, non-potable water recycling, demand management, and long-term transfers.

The San Jose Water Company serves the project site. The existing water supply system to the project site consists of lines of various sizes within the street rights-of-way. The lines range in size from a 3-inch line in Devine Street to 12-inch lines in North San Pedro Street and West Julian Street. A 4-inch line runs east and west on the north end of the project site on Bassett Street. Four and 12-inch lines run north and south on the east side of the project site on San Pedro Street. Four and 6-inch lines run north and south on Terraine Street. A 12-inch line runs east and west on West Julian Street in the middle of the project site.

(2) Water Conservation. The City's water conservation and water reclamation programs are intended to minimize flows to the sanitary sewer and sewage treatment systems, and to meet future water needs. Elements of the City's active water conservation program include: limited landscape watering hours, restrictions on the use of potable water for construction purposes, ultra-low flow toilet incentives, a showerhead retrofit program, landscape ordinances for non-residential new construction, commercial/industrial water audits, financial incentives for commercial/industrial conservation, water use prohibitions, and a ban on cleaning vehicles without an automatic shut-off valve.

(3) Water Recycling. The City of San Jose administers the South Bay Recycling program, a long-term program for the Cities of Milpitas, San Jose, and Santa Clara created to bring a reliable, sustainable, and drought-proof supply of water to the South Bay area. The recycled water system includes pump stations, reservoirs, and extensive pipelines. The largest pipeline sections affecting the Project Area run underground on North 12th Street and Senter Road in San Jose. Wastewater from the sanitary sewer system travels to the San Jose/Santa Clara Water Pollution Control Plant (SJ/SC WPCP) for treatment. During summer months, about 10 percent of the wastewater flowing to the treatment plant is recycled and pumped through pipelines to over 400 connections to irrigate golf courses, parks, schools and agricultural lands, and for industrial purposes and cooling towers. Fiscal year 2001-2002 estimates for recycled water production were 6,000 AF/year.[5] Without any large infrastructural improvements, the system has the capacity to produce 11,000 AF/year.

c. Sanitary Sewer Service and Wastewater Treatment. The San Jose/Santa Clara Water Pollution Control Plant (Plant) provides wastewater treatment for the project area. The Plant is a regional facility located in North San Jose, and provides tertiary treatment of wastewater from several surrounding cities and sanitation districts. The cities of San Jose and Santa Clara jointly own the facility, but the City of San Jose operates and maintains the Plant.

The Plant is rated for a treatment capacity of 167 million gallons per day (mgd). The average dry weather influent flow (or peak week flow) is determined as the highest average flow during any five-weekday period between the months of June and October. For 2002, peak week flow was 118.27 mgd and occurred the week of June 10th through June 14th. The Plant's treatment capacity of 167 mgd is allocated between the several agencies served and two co-owners. The total capacity allotted to the City of San Jose is approximately 106.39 mgd.

[5] Jennifer Durkin, South Bay Water Recycle Program Associate Environmental Services Specialist. March 2003

In the dry weather period of May through October, the Plant is required by the San Francisco Bay Regional Water Quality Control Board (RWQCB) to discharge no more than 120 mgd into the South San Francisco Bay. The Plant has had programs in place since 1991 to reduce and maintain flows below 120 mgd. For the last five years, the Plant has been in compliance with this requirement. The average dry weather effluent flow for 2002 was 104 mgd. Long-term plans to remain in compliance with the 120-mgd requirement include ongoing water conservation and water recycling.

The existing sanitary sewer collection system which serves the project site consists of a 33-inch line on Bassett Street; a 54-inch line on Terraine Street; an 18-inch line on North San Pedro Street; and an 8-inch line on Devine Street. No sewer lines run on West Julian Street, west of North San Pedro Street; however, an 8-inch line runs on West Julian Street, east of North San Pedro Street.

d. Storm Drainage. The City of San Jose's Departments of Transportation and Public Works are responsible for the development, operation, and maintenance of the storm sewer system throughout the City. The system collects runoff water from the street and carries it to the creeks and rivers that drain into the San Francisco Bay; storm water is not treated before being released into the Bay. In 1997, the SCVWD, Santa Clara County, and 13 cities adopted the *Urban Runoff Management Plan*, intended to reduce polluted runoff entering local waterways.

The existing storm drain lines within the project area convey storm runoff adequately, although minor flooding can occur; the City's policy regarding storm drainage is to design new projects to minimize flooding on public streets and to minimize property damage from storm water.

The project site currently contains three different storm drain lines along the north side of the site on Bassett Street. Running west to east, the storm drain lines consist of a 24-inch line that converts into a 12-inch line, which then converts into a 27-inch line. There is also a 36-inch line on Terraine Street, a 30-inch line on West Julian Street, and a 15-inch line on North San Pedro Street. This storm drain system discharges into the Guadalupe River, northwest of the project site, and was designed to serve a ten-year return period storm.

e. Solid Waste. Norcal Waste Systems and Green Team of San Jose, both privately-owned companies, provide residential solid waste collection services in San Jose. Multi-family residential solid waste and recycling collection services in San Jose are provided by Green Team. Other private waste haulers, including Browning-Ferris Industries, provide non-residential solid waste collection services.

According to the Source Reduction and Recycling Element prepared for the City of San Jose and the County-wide Integrated Waste Management Plan, there is sufficient landfill capacity for Santa Clara County for approximately 23 years. Four landfills receive solid waste from San Jose: Guadalupe, Kirby Canyon, Newby Island, and Zanker Road, the latter of which also accepts recyclable construction and demolition waste, self-haul loads, and yard trimmings. Currently, the City contracts with International Disposal Corporation for residential solid waste disposal at the Newby Island Landfill, which has a permitted capacity of 50.8 million cubic yards and an estimated life of approximately 18 years. San Jose disposes of approximately 400,000 tons of garbage per year at Newby Island. The permitted capacity and estimated life of the Guadalupe Landfill is 16.5 million cubic yards and 8 years, respectively. The Kirby Landfill has a permitted capacity of 36.4 million cubic yards and an estimated life of approximately 20 years.

San Jose was required by the Integrated Waste Management Act of 1989 (AB 939) to divert 50 percent of its solid waste from landfills by the end of calendar year 2000 through the implementation of various strategies, including source reduction, composting, recycling, and yard waste programs. Using a combination of financial incentives, public education, technical assistance, and recycling collection services, the City increased its diversion rate dramatically from 11 percent in 1990 to 44 percent in 1995. In the subsequent three years, however, the diversion rate dropped slightly to 43 percent, indicating that new initiatives were needed to achieve the mandated goal. Preliminary data for the years 1999 and 2000 show waste diversion rates of 46 percent and 53 percent, respectively.[6] The State has since approved San Jose's diversion rates for 1999 and 2000 of 59 percent and 64 percent respectively.

2. Impacts and Mitigation Measures

The following section evaluates impacts related to utilities and infrastructure service systems that could result from the implementation of the proposed project. The section begins with the criteria of significance, which establish the thresholds to determine whether an impact is significant and concludes with impacts of the project and mitigation measures, if required.

a. Criteria of Significance. Implementation of the proposed project would have significant impacts on utilities and infrastructure service systems if it would have the following effects:

- Exceed wastewater treatment requirements of the Regional Water Quality Control Board (RWQCB);
- Require the extension or substantial reconstruction of major water and wastewater lines to serve new development;
- Create substantial demand for water beyond the existing or planned City's water supply, requiring additional water storage capacity;
- Generate wastewater flows that would exceed the existing or planned wastewater treatment, storage and disposal capacity of the Santa Clara Valley Water District (SCVWD) wastewater treatment plant;
- Interfere with the accomplishment of waste diversion goals mandated by the California Integrated Waste Management Act;
- Require or result in the construction of a new storm water or wastewater facility or expansion of existing facilities, the construction of which could cause significant environmental effects;
- Result in a determination by the wastewater treatment provider that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments;
- Require new or expanded entitlements for water supplies; or
- Be served by a landfill with insufficient permitted capacity.

[6] California Integrated Waste Management Board, 2003. Jurisdiction Profile for City of San Jose. Website: www.ciwmb.ca.gov/profiles/juris.

b. Less-than-Significant Impacts. The proposed project would create a small increase in demand for each of the utilities and service systems addressed in this section. However, in each case, the extent of the increased draw on those services would be within the physical and financial capability of the provider.

Facilities providing electricity, natural gas and telephone services are built and maintained by the private utilities that provide these services under their franchise agreements with the State of California. New and expanded facilities are paid for from capital funds financed by fees paid by users. All of the utilities monitor the plans and growth patterns of the urban jurisdictions that they serve and, in doing so, maintain adequate backbone infrastructure to serve new development of the scale of the proposed project. (Potential impacts related to energy supplies are also addressed in Chapter V, N. Energy.) As part of the proposed project, all power and communications utility lines located along Bassett Street, Terraine Street, North San Pedro Street, and W. Julian would be relocated underground. A total of approximately 600 linear feet of underground telephone line along the existing curvilinear Julian Street would have to be relocated. When added to the necessary new undergrounding of power and other communications facilities, a total of 2,430 linear feet of this construction would be undertaken within the project area.

Once fully occupied, the proposed project would increase the demand for potable water by approximately 225,000 gallons per day for residential units and 13,000 gallons per day for commercial uses.[7] According to the San Jose Water Company, adequate water supplies are available to meet this increase in demand. New lateral water supply lines within the site would have to be constructed and connected to the main lines described above. The responsibility for construction of these lines would rest with the developer of the site. At the time that a specific development permit application is made, water-conserving technologies and design features should be incorporated into the project. These elements of the project should include both indoor and outdoor features.

The proposed project would generate a wastewater flow of 191,250 gallons per day for residential units and 11,000 gallons per day for commercial uses.[8] This increase in wastewater flow could be accommodated at the City's Water Pollution Control Plant. New lateral sanitary sewer lines within the site would have to be constructed and connected to the trunk lines described above. The responsibility for construction of these lines would rest with the developer of the site.

At the time that a specific development project is proposed and evaluated, indoor and outdoor water conserving technologies and practices could be integrated into the development.

Solid waste generated by the project would include 8,100 pounds per day for the residential units and 1,500 pounds per day for the commercial uses. In addition, approximately 900 pounds per day of residential recyclable materials would be collected.[9] As noted above, sufficient capacity exists at local landfills for at least another 23 years. Consistent with City policies, construction and demolition activities will be subject to recycling standards, and the new buildings will be designed to facilitate recycling activities.

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[7] Assumes water use of 150 gpd per dwelling unit for residential and 0.216 gpd per square foot of commercial uses.

[8] Assumes wastewater generation rate is approximately 85 percent of potable water demand.

[9] Assumes solid waste generation of 2.5 pounds per 100 square feet per day for general commercial uses and 5.4 pounds per day per dwelling unit. Recycling estimate was based on 0.6 pounds per day per dwelling unit.

c. Significant Impacts and Mitigation Measures. No significant adverse impacts related to utilities and service systems would result from the proposed project.

N. ENERGY

Appendix F of the *CEQA Guidelines* requires that an EIR include information on the potentially significant energy implications of a project, with particular emphasis on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy. This section describes the existing energy resources available within the project site and analyzes the impacts related to these resources that would result from the implementation of the proposed project. Where appropriate, mitigation measures are recommended.

1. Setting

The following section discusses existing energy sources, as well as the planning and regulatory framework that governs energy use.

a. Energy Resources. The Pacific Gas and Electric Company (PG&E) provides natural gas and electricity services to the City, including the project site, from a variety of renewable and non-renewable sources both within and outside of the State. Within the City's boundaries, there are a number of facilities that produce and transmit power throughout the City. Currently, there are six power plants within City limits and the new Metcalf power plant is being constructed in the southeastern area of San Jose near Metcalf Road and Monterey Highway. The Metcalf Energy Center is expected to be online in 2004[1]. It is anticipated that adequate electricity and natural gas service infrastructure is available to serve the project site.

b. Regulatory Framework. California's recent energy crisis prompted the City of San Jose to begin efforts to promote energy conservation, energy efficiency, and alternative energy sources to achieve greater self-sufficiency and system reliability. San Jose's recent efforts are briefly described below.

(1) Smart Energy Plan. In March 2001, the City adopted a Smart Energy Plan, which includes discussions and implementation steps for the following strategies:

- Explore regional energy solutions together with neighboring communities.
- Collaborate with neighboring communities to identify regional criteria for appropriate locations for new large clean plants in Silicon Valley that do not harm residential communities.
- Explore creative energy partnerships among cities, the State, and federal governments, and the private sector to help ensure reliable supplies and achieve conservation.
- Reduce the City's energy demand through vigorous conservation efforts to achieve at least a 10 percent savings and encourage community conservation.
- Expand the City's model program for energy-efficient buildings to encourage long-term permanent conservation.
- Actively encourage small clean power plants in San Jose that can be located in appropriate industrial areas and publicly-owned lands, not in residential neighborhoods.
- Set clear predictable standards for clean energy generation projects within the City's authority and streamline the City's review and approval of appropriate power projects.

[1] Calpine Corporation website: www.metcalfenergycenter.com.

(2) City Programs. The City also has a number of programs to further promote energy conservation among residents and businesses in the City. The Low Income Energy Assistance Program provides financial assistance for energy bill payments to eligible residents, as defined by the California Low Income Home Energy Assistance Program guidelines. In addition, energy efficiency education, audits, and improvements are provided to eligible residents, as defined by the City of San Jose Community Development Block Grant guidelines.

The Cool Communities Program and policies are designed to mitigate the Urban Heat Island effect (in which urban areas can be 6-10 degrees warmer than the surrounding countryside due to heat storing properties of urban surfaces), reducing energy use and air pollution resulting from extreme summer temperatures. Cool Communities policies also include tree planting and green roofs to increase both quality of life and property values while reducing urban runoff. San Jose participated in an Urban Heat Island Reduction Initiative of the U.S. Environmental Protection Agency (EPA), which provided City staff with technical and policy expertise. The City is also a participant in the Cities for Climate Protection Campaign, which engages local governments in developing and implementing policies and programs to reduce the greenhouse gas emissions that contribute to global warming.

The City is also an active member of the Bay Area Solar Consortium, which promotes the installation of solar technologies throughout the San Francisco and Monterey Bay areas. The South Bay Clean Cities Coalition, one of 80 coalitions nationwide that comprise the Clean Cities Program of the U.S. Department of Energy, is coordinated by the City's Environmental Services Department and works to advance the use of alternative vehicles and the infrastructure of alternative fuels.

(3) Green Building Policies. The San Jose City Council adopted the Green Building Policies on June 19, 2001, to demonstrate the City's commitment to the environmental, economic, and social stewardship and to yield cost savings to city taxpayers through reduced operating costs, to provide healthy work environments for staff and visitors, and to contribute to the City's goals of protecting, conserving, and enhancing the region's environmental resources. The Green Building policy goals include a series in the category of energy and atmosphere. Energy and atmosphere policy goals are as follows:

- Minimum Energy Performance: establish the minimum level of energy efficiency for the base building and systems.
- Optimize Energy Performance: achieve increasing levels of energy performance above the minimum standard to reduce environmental impacts associated with excessive energy use.
- Building Commissioning: verify and ensure that the entire building is designed, constructed, and calibrated to operate as intended.
- Measurement and Verification: provide for the ongoing accountability and optimization of building energy and water consumption performance over time.
- Renewable Energy: encourage and recognize increasing levels of self-supply through renewable technologies to reduce environmental impacts associated with fossil fuel energy use.
- Green Power: encourage the development and use of grid-source, renewable energy technologies on a net zero pollution basis.
- Reduce Ozone Depletion: support early compliance with the Montreal Protocol by eliminating the use of CFC-based refrigerants and reducing the use of HCFCs and halons.

As part of its promotion of Green Building policies, the City encourages participation in City-sponsored organized educational and training events covering green building topics to increase the use of green building techniques in municipal, commercial, and residential building development projects in the City and create greater awareness of these practices.

2. Impacts and Mitigation Measures

The following section evaluates impacts related to energy that could result from the proposed project. The section begins with the criteria of significance, which establish the thresholds to determine whether an impact is significant. The latter part of this section presents the impacts from the project and mitigation measures, if required. The impacts of the proposed project are divided into separate categories based on their significance according to the criteria listed below: less-than-significant impacts, which do not require mitigation measures, and significant impacts, which do require mitigation measures.

a. Criteria of Significance. Implementation of the proposed project would have significant impacts on energy if it would have the following effects:

- Directly affect a major energy line or facility;
- Result in a substantial increase in the demand for energy supplies or transmission services; or
- Use energy in a wasteful manner.

b. Less-than-Significant Impacts. The proposed new residential and retail uses on the site would be more intensive than the existing or historic on-site conditions and would therefore use more energy of several types. The proposed project would consume energy in three forms: 1) the fuel energy consumed by construction vehicles; 2) bound energy in construction materials, such as asphalt, steel, concrete, pipes, and manufactured or processed materials such as lumber and glass; and 3) ongoing energy required for interior lighting, heating/ventilating/air conditioning (HVAC), computers/printers, entertainment components, and security systems. However, all new development is required to incorporate energy conservation measures in compliance with Title 24 and the Uniform Building Code. Compliance with the requirements of Title 24 would adequately mitigate this potential impact to a less-than-significant level.

The proposed project would not affect any major energy line or facility. Small distribution lines may need to be upgraded or installed for the new development.

c. Significant Impacts and Mitigation Measures. No significant adverse impacts related to energy would result from the proposed project.

VI. CUMULATIVE IMPACTS

A. CUMULATIVE PROJECT LIST

CEQA defines cumulative impacts as "two or more individual effects which, when considered together, are considerable, or which can compound or increase other environmental impacts." Section 15130 of the *CEQA Guidelines* requires that an EIR evaluate potential environmental impacts that are individually limited but cumulatively significant. These impacts can result from the proposed project alone, or together with other projects. "The cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects."

When evaluating cumulative impacts, CEQA allows the use of either a list of past, present, and probable future projects, including projects outside the control of the (lead) agency, or a summary of projections in an adopted planning document. Generally, this EIR bases its cumulative analysis on the buildout of the list of approved and/or pending projects presented in Table VI-1 and Figure VI-1.

An exception to the description of this list-based cumulative analysis methodology relates to the cumulative analyses of traffic, air quality and noise. A more customized approach was necessitated by the model used to analyze traffic impacts, and for potential cumulative air quality and noise impacts, to the extent that they stem from outputs generated by the traffic analysis. Cumulative traffic volumes were estimated by applying to the existing volumes an annual growth rate of 1.2 percent, then adding the trips from approved developments, estimated project trips, and estimated trips resulting from the proposed future projects within the Downtown area (see Table VI-1).

The cumulative air quality and noise impacts were analyzed partly on the basis of the cumulative traffic projections stemming from the above methods. Where specific projects from the list in Table VI-1 could cause cumulative impacts in combination with the proposed Project, they have been considered.

B. CUMULATIVE IMPACT ANALYSIS BY TOPIC

Potentially significant cumulative impacts to which the proposed project may contribute are discussed below, for each topic evaluated in Chapter IV, in the order presented there.

1. Land Use

a. Cumulative Impacts. While the Brandenburg Mixed Use Project would be developed in the context of many other similar development projects in Downtown San Jose, these projects are not expected to jointly create land use incompatibilities. In recent years, the Downtown area has been the subject of a number of residential and mixed use redevelopment projects and, while these previous projects as well as the current list of pending projects will result in land use changes throughout the

Table VI-1: Cumulative Projects List

Project Name	Land Use	Description
1. FMC	Office/Research & Development	3,000,000 sf
2. San Jose Water Company	Commercial/Residential	Up to 1,025,000 sf of commercial and retail uses east of Delmas Avenue; up to 325 residential units; and up to 15,000 sf of commercial retail uses west of Delmas Avenue.
3. Greyhound	Mixed Use	250 residential units, 20,000 sf of retail uses and 1,025 parking spaces.
4. Heart of the City Project (CIM Group LLC)	Mixed Use, on multiple parcels	*Second and Santa Clara parcel*: 44 condominiums; 30 apartments; 17,000 sf retail; and 172 total parking spaces. *Fountain Alley parcel*: 100 apartments; 32,250 sf retail; and 238 total parking spaces. *Block Three*: 335 condominiums; 68,000 sf retail; and 746 total parking spaces.
5. Regis Housing	Residential	38 single family attached units.
6. Classic Communities	Residential	42 single family attached units.

Source: City of San Jose Planning Department, 2003; San Jose Redevelopment Agency, 2003.

area, such changes are generally consistent with the City's goals and policies for the area as expressed in the City's General Plan and the Downtown Strategy. The proposed new uses and intensified uses would be compatible with each other and with other uses in the area.

b. Cumulative Mitigation Measures. No mitigation measures would be necessary for cumulative land use impacts.

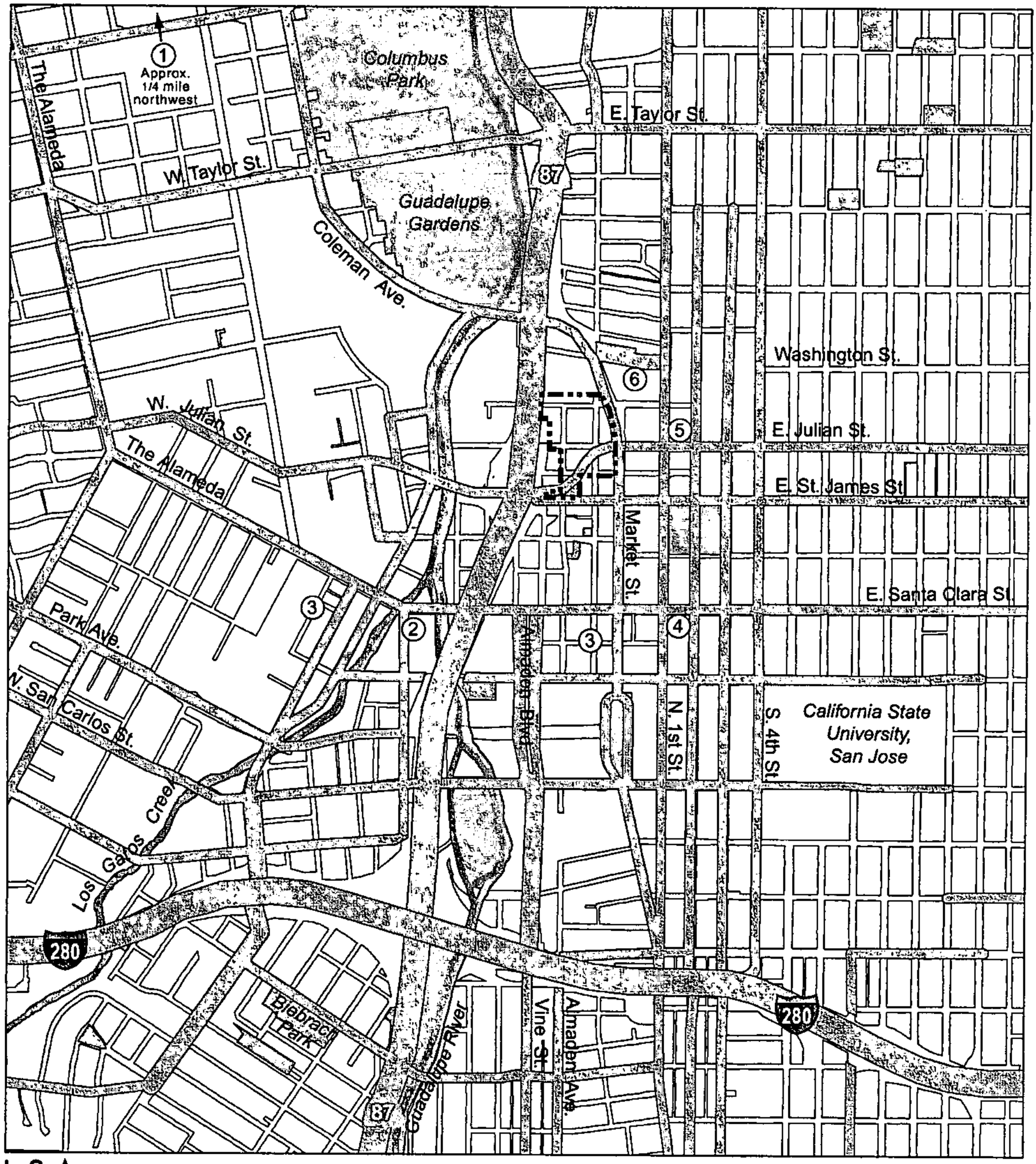
2. Transportation and Circulation

a. Cumulative Impacts. Three potential cumulative impacts related to transportation and circulation impacts of the project are evaluated below: local intersection level of service; congestion management program level of service; and Julian Street interchange. Following those discussions is a summary of the cumulative effects of the 40 General Plan amendments under consideration in San Jose. Those results are described in greater detail in the separate General Plan Amendment Traffic Analysis Report, prepared by Hexagon Transportation Consultants and, provided as Appendix B.2 in Volume 2 of this EIR.

(1) City of San Jose Level of Service Analysis. The results of the level of service analysis under cumulative conditions are summarized in Table 16 in Appendix B.1 (the Traffic Impact Analysis). The results show that four study intersections would operate at an unacceptable LOS E or worse during at least one of the peak hours under cumulative conditions.

In other words, in addition to the impacts identified under project conditions, two additional intersections would be impacted under cumulative conditions:

- SR 87 and Julian Street (E)
- First Street and I-880 (N)



LSA

FIGURE VI-1

Brandenburg Mixed Use Project/
North San Pedro Housing Sites
Cumulative Projects

SOURCE: LSA ASSOCIATES, INC., 2003.

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Improvements have been identified that would mitigate the impacts at the above intersections.

- *SR 87 and Julian Street (E)* – Necessary improvements include the addition of a second exclusive left-turn lane at the freeway northbound off-ramp, addition of a separate northbound right-turn lane on Notre Dame, addition of an exclusive westbound right-turn lane, and changes to the signal phasing. The implementation of these improvements would improve intersection levels of service to LOS E and D during the AM and PM peak hours, respectively. These levels of service would meet the CMP standards, but not the City of San Jose standards. There are no further feasible improvements that could be implemented at this intersection.
- *First Street and I-880 (N)* – The necessary improvement to mitigate the project impact at this intersection would consist of the addition of an exclusive westbound right-turn lane. This would require some widening of the off-ramp. The implementation of this improvement would improve intersection level of service to LOS C and B during the AM and PM peak hours, respectively, under cumulative conditions.

(2) CMP Level of Service Analysis. The level of service results for the CMP intersections under cumulative conditions are summarized in Table 16 in Appendix B (the Traffic Impact Analysis). The results show that all of the CMP study intersections would operate at an acceptable LOS E or better under cumulative conditions.

(3) Julian Street Interchange Analysis. Traffic from other planned development in the Downtown area and the annual background growth factor (assumed to be 1.2 percent annually), would increase the SR 87 ramp volumes at Julian Street. Even with the additional future growth, the ramps would continue to operate below capacity levels, as show in Table 17 in Appendix B.

Caltrans is considering ramp metering at the SR 87/Julian interchange. The future traffic volumes expected on the southbound on-ramps during the PM peak hour are higher than typically can be accommodated in a single metered lane. Therefore, either two lanes need to be provided at the meter or traffic will back up. Observations have shown that motorists typically will tolerate up to a ten-minute wait. Under project conditions, westbound queues could extend beyond adjacent intersections, interfering with other traffic. Therefore, before a plan is implemented to meter the ramps at Julian/SR 87, it may be necessary to increase the ramp storage by widening the southbound on-ramps to at least two lanes each. The installation of a second lane to the southbound loop on-ramp is planned by CalTrans as part of the SR 87 high occupancy vehicle (HOV) lane improvements. Construction is scheduled to begin in 2003 and be completed by 2005. This project is fully funded by Measure B (1996 Sales Tax Initiantive). With this improvement, impacts to the southbound loop on-ramp would be eliminated.

(4) General Plan Amendments Cumulative Analysis. Appendix B.2 provides a detailed analysis of the cumulative effects of all 40 General Plan amendments that are under consideration in San Jose. Three types of analysis are summarized there: (1) screenline analysis; (2) vehicle miles traveled (VMT) and vehicle hours traveled (VHT); and (3) LOS E/F link analysis. The results of that analysis are presented below, preceded by the thresholds of significance against which the results are measured.

Thresholds of Significance. For the purposes of this EIR, a cumulative transportation impact is considered significant if any of the following occur:

- Peak direction volumes across any one of the three subregional screenlines increase by the percentage shown in Table VI-2; or
- Average vehicle miles traveled (VMT) and vehicle hours traveled (VHT) both increase by 0.20 percent for all roadways in the San Jose Sphere of Influence; or
- Peak direction volume on LOS E/F links increases by 1.50 percent or more on any of the congested link sets analyzed for any individual proposed land use amendment.

Table VI-2: Screenline Impact Criteria

Subarea	Percentage Change
North San Jose	0.20%
Evergreen	0.10%
South San Jose	0.20%

Source: City of San Jose, 2003.

The proposed land use changes were evaluated to determine the combined effects of the amendments on the citywide transportation system. Increases in peak direction volumes across the three identified screenlines (see Table VI-2) for the Special Subareas; citywide changes in Vehicle Miles Traveled (VMT) and Vehicle Hours Traveled (VHT); and the combined effects on all of the LOS E/F links evaluated for each of the General Plan amendments were analyzed.

Screenline Analysis. On any roadway system, there are areas through which major travel movements occur, most notably commute trips. In San Jose, the major commute is made between job sites in the north and west areas of the County, and the residential areas in the east and south areas of the City. Also of interest is the travel corridor through which commuters from the East Bay travel to get to and from job sites in north San Jose, Santa Clara, and Sunnyvale. Travel between these areas takes place in "travel corridors" usually defined by a freeway and made up of the freeway and several parallel roadway facilities.

Screenlines for the City of San Jose's TRANPLAN analysis are based on the boundaries of three subareas that are known to experience substantial congestion during commute periods: North San Jose (or the "Golden Triangle"), Evergreen, and South San Jose (generally south of Blossom Hill Road). Substantial changes in peak direction volumes crossing the identified boundaries would indicate a significant increase in existing congestion. Because the existing and planned land uses in north San Jose are predominantly industrial and job-intensive, proposals that increase housing and/or decrease jobs in that area will reduce volumes across that screenline. Existing and planned land uses in Evergreen and south San Jose are predominantly residential. Amendments that place more housing north of those two areas, or that place more jobs south of those screenlines will decrease volumes across the screenlines. The results of the screenline analysis are summarized in Table VI-3. The detailed screenline analysis can be found in the Traffic Analysis in Appendix B.

As shown in Table VI-3, the cumulative effect of the pending amendments would be to reduce peak hour volumes across all three screenlines. Therefore, the approval of all of the currently proposed General Plan amendments would not result in significant adverse traffic impacts based on the thresholds of significance identified above.

Table VI-3: Cumulative Screenline Impacts

Subarea	Percentage Change
North San Jose	-3.59%
Evergreen	-1.19%
South San Jose	-0.93%

Source: City of San Jose, 2003.

Vehicle Miles Traveled (VMT) and Vehicle Hours Traveled (VHT). In general, whenever new trips are added to the transportation system, Vehicle Miles Traveled (VMT) and Vehicle Hours

Traveled (VHT) will increase proportionally to the number of trips being added. There are several types of land use changes that can be exceptions to this generalization.

Land use changes that tend to minimize the increase in VMT and VHT are land use changes that involve adding new housing closer to jobs, or new jobs closer to housing.

In an area dominated by housing, adding jobs without displacing housing, while increasing trips, can actually reduce VMT and VHT by reducing commute distances (i.e., VMT) and by reducing travel made in the peak direction, which reduces VHT. These types of land use changes can cause trips to be internalized within the area in which the change is proposed and can reduce through trips in adjacent areas, thereby reducing VMT and VHT.

Adding jobs and displacing housing in an area dominated by housing will usually reduce VMT and VHT because the displaced trips, usually traveling in the peak direction, are eliminated (thus reducing VMT and VHT). The substituted trips are usually shorter in length (thus reducing VMT) and travel mainly in the non-peak direction (thus reducing VHT). This type of land use change will cause trips to be internalized within the area in which the change is proposed and can reduce through trips in adjacent areas, both as a result of the internalization as well as the reduced number of trips made from households.

In an area dominated by jobs, adding more jobs will increase both VMT and VHT. If the immediate area is already congested, the VHT will increase by more than the VMT because the additional congestion caused by the new trips affects the travel time of all trips in the area. This condition can result in an overall decrease in average speeds on the transportation system.

A detailed comparison between the year 2010 VMT and VHT for the adopted General Plan base case condition versus the conditions that would result from approval of all of the pending General Plan Amendments can be found in Appendix B. The analysis found that the overall effect on all City of San Jose streets would be a reduction in VMT by 0.53 percent, and a reduction in VHT by 0.75 percent. Since the threshold of signficance is an *increase* in both VMT and VHT, the cumulative impact on VMT and VHT of all of the pending General Plan amendments would not be significant.

LOS E/F Link Analysis. For individually proposed land use amendments that are not exempt and are located outside the three Special Subareas, the threshold of significance for traffic impacts is based on the contribution the individual amendment would make to existing peak hour congestion in its immediate vicinity. For the cumulative analysis, the addition of peak direction trips from all pending amendments are evaluated across all of the links examined for the individual amendments.

Appendix B lists all of the links evaluated in this cumulative analysis, and compares the anticipated changes in peak hour volumes on those links with the volumes anticipated for the approved General Plan condition. It should be emphasized that these changes in link volumes are the result of traffic changes anticipated from all of the General Plan amendments. The analysis found that 34 of the 40 General Plan amendments are proximate to one or more links that operate at LOS E or F for the adopted General Plan base case, and the cumulative effects of all of the proposed General Plan Amendments cause the peak direction link volumes to increase by 1.50 percent or more at four sets of links. The four links that are anticipated to experience increases of 1.50 percent or more are shown in

Table VI-4. Therefore, the increases in volumes at the four identified link sets resulting from the cumulative impacts of all the proposed General Plan Amendments constitute cumulatively significant adverse traffic impacts, based on the thresholds of significance identified above.

Table VI-4: Significant Cumulative E/F Link Impacts

Proposed Amendment	Link Location	Percentage Increase
GP03-03-01	South of I-280	2.11 %
GP03-03-01	South of Jackson	5.55%
GP03-03-01	North side of Julian	3.58%
GP03-03-12	North of Hedding	5.06%

Source: City of San Jose, 2003.

Conclusion. The contribution of the proposed General Plan amendment evaluated in this EIR would result in a cumulatively considerable contribution to the cumulatively significant traffic impact.

The cumulative impacts from implementation of all of the 40 proposed General Plan amendments would include significant increases in peak direction, peak hour traffic congestion at four locations which would exceed LOS City standards under the existing General Plan. (Significant Cumulative Impact)

b. Cumulative Mitigation Measures. Mitigation measures are recommended to address City of San Jose LOS impacts at two locations. At a third location, no mitigation is feasible.

(1) SR 87 and Julian Street (E). Add a second exclusive left-turn lane at the freeway northbound off-ramp, add a separate northbound right-turn lane on Notre Dame, add an exclusive westbound right-turn lane, and change signal phasing. The implementation of these improvements would improve intersection levels of service to LOS E and D during the AM and PM peak hours, respectively. These levels of service would meet the CMP standards, but not the City of San Jose standards. There are no further feasible improvements that could be implemented at this intersection.

(2) First Street and I-880 (N). Add an exclusive westbound right-turn lane (requiring widening of the off-ramp). The implementation of this improvement would improve intersection level of service to LOS C and B during the AM and PM peak hours, respectively, under cumulative conditions.

In addition to the cumulative impacts related to LOS on city streets, a mitigation is described above that would reduce impacts to the Julian Street interchange with SR 87. It would involve ramp metering at the SR 87/Julian interchange. Before a plan is implemented to meter the ramps at Julian/SR 87, it may be necessary to increase the ramp storage by widening the southbound on-ramps to at least two lanes each. The installation of a second lane to the southbound loop on-ramp is planned by CalTrans as part of the SR 87 high occupancy vehicle (HOV) lane improvements. Construction is scheduled to begin in 2003 and be completed by 2005. With this improvement, impacts to the southbound loop on-ramp would be eliminated.

3. Air Quality

a. Cumulative Impacts. Any proposed project which would individually have a significant air quality impact would also be considered to be a significant contributor to cumulative air quality impacts. Because the projected long-term criteria pollutant emissions associated with the proposed Project would result in significant unavoidable impacts, the Project would be considered a significant contributor to cumulative air quality impacts.

A number of individual projects in the City of San Jose area may be under construction simultaneously with the proposed Project. Depending on construction schedules and actual implementation of projects in the area, generation of fugitive dust and pollutant emissions during construction of the proposed Project and other cumulative projects may result in substantial short-term increases in air pollutants. This would be a contribution to short-term cumulative air quality impacts. However, each individual project would be subject to BAAQMD regulations and other requirements during construction. Therefore, cumulative construction-related air quality impacts would be considered less than significant.

b. Cumulative Mitigation Measures. No additional mitigation measures, beyond those identified for the proposed Project (see Chapter V.C, Air Quality) would be available.

4. Noise

a. Cumulative Impacts. Construction activities and on-site stationary sources are localized noise sources and would affect only land uses immediately adjacent to the Project site, their occurrence in combination with construction of other nearby projects could cumulatively affect existing residences adjacent to and in the vicinity of the Project site. Although each contractor will be required to comply with the City's noise standards, the cumulative construction noise impacts could be short-term, temporary adverse impacts to residences exposed to both activities. Such cumulative construction noise impacts would be considered less-than-significant due to the temporary nature of the noise impacts.

Development of the proposed projects shown in Table VI-1 will draw more residents and employees to Downtown San Jose, leading to increased noise levels. As shown in Tables V.D-3 and V.D-4, future noise in the vicinity of the Project site would increase to the point that it would exceed the City's General Plan short-term exterior noise goal of 60 DNL for residential uses. The Brandenburg Mixed Use Project would contribute to this significant cumulative adverse impact.

b. Cumulative Mitigation Measures. No additional mitigation measures, beyond those identified for the proposed Project (see Chapter V.D, Noise) would be necessary.

5. Shade And Shadow

a. Cumulative Impacts. No significant unavoidable impacts to shade and shadow would result from the proposed project and no cumulative impacts from the past, present and probable projects listed in Table VI-1 are expected.

b. Cumulative Mitigation Measures. No mitigation measures would be needed.

6. Aesthetics

a. Cumulative Impacts. No significant unavoidable impacts to aesthetics would result from the proposed project and no cumulative impacts from the past, present and probable projects listed in Table VI-1 are expected.

b. Cumulative Mitigation Measures. No mitigation measures would be needed.

7. Vegetation and Wildlife

a. Cumulative Impacts. The construction of the proposed Project would not lead to any cumulative impacts related to biological resources. Prior to the onsite remediation of soils that has involved deep excavation on several parcels, the site was covered by buildings and/or pavement. Minimal landscaping is present, mostly adjacent to buildings and at scattered locations within parking lots. Wildlife species found on the site are those typically found in urban areas. No special-status plant species or potentially suitable habitat for these species were observed on the project site.

While there are approximately 22 trees on the site that meet the City's standard for protection due to their size (see Chapter IV.G, Vegetation and Wildlife) and that would be removed as part of the project, the loss of these trees is not significant.

b. Cumulative Mitigation Measures. No mitigation measures beyond VEG-1 (which requires tree replacement for ordinance size trees at a ratio of 4:1) would be necessary for cumulative vegetation and wildlife impacts.

8. Geology

a. Cumulative Impacts. The proposed Project would not lead to any cumulative impacts related to geology. Implementation of the Project in combination with other cumulative development would increase the number of residents and employees exposed to regional seismic risks in the seismically active San Francisco Bay Area, but no other impact related to geology, soils or seismicity would result.

b. Cumulative Mitigation Measures. No additional mitigation measures, beyond those identified for the proposed Project (see Chapter V.H, Geology) would be necessary.

9. Cultural Resources

a. Cumulative Impacts. No significant unavoidable impacts to cultural resources would result from the proposed project and no cumulative impacts from the past, present and probable projects listed in Table VI-1 are expected.

b. Cumulative Mitigation Measures. No additional mitigation measures, beyond those identified for the proposed Project (see Chapter V.I, Cultural Resources) would be necessary.

10. Hazards

a. Cumulative Impacts. No significant unavoidable impacts related to hazards would result from the proposed project and no cumulative impacts from the past, present and probable projects listed in Table VI-1 are expected.

b. Cumulative Mitigation Measures. No additional mitigation measures, beyond those identified for the proposed Project (see Chapter V.J, Hazards) would be necessary.

11. Public Facilities and Services

a. Cumulative Impacts. No significant unavoidable impacts related to public facilities and services would result from the proposed project and no cumulative impacts from the past, present and probable projects listed in Table VI-1 are expected.

b. Cumulative Mitigation Measures. No additional mitigation measures, beyond those identified for the proposed Project (see Chapter V.K, Public Facilities and Services) would be necessary.

12. Hydrology and Flooding

a. Cumulative Impacts. The proposed Project would not lead to any cumulative unmitigable impacts related to hydrology and storm drainage. However, construction and operation of the proposed Project in combination with the other cumulative projects could add to both the volume of storm runoff carried by local drainage system and to the contaminants carried in the runoff, adversely affecting water quality in the receiving waters of the Guadalupe River and San Francisco Bay. Project-specific mitigation measures (including compliance with the NPDES standards as described in Chapter V) required for each of these projects would be incorporated into their design and operation so as to reduce impacts to a less-than-significant level.

b. Cumulative Mitigation Measures. No additional mitigation measures, beyond those identified for the proposed Project (see Chapter V.L, Hydrology and Flooding) would be necessary.

13. Utilities and Service Systems

a. Cumulative Impacts. No significant unavoidable impacts related to utilities and service systems would result from the proposed project and no cumulative impacts from the past, present and probable projects listed in Table VI-1 are expected.

b. Cumulative Mitigation Measures. No additional mitigation measures, beyond those identified for the proposed Project (see Chapter V.M, Utilities and Service Systems) would be necessary.

14. Energy

a. Cumulative Impacts. Development of the cumulative projects listed in Table VI-1 would require the extension of, and connections to, existing electrical and natural gas transmission and distribution system served by Pacific Gas & Electric (PG&E). PG&E's existing facilities are able to serve these levels of development or could be expanded to do so through standard expansion processes. All expansion of electrical and natural gas facilities and services would be undertaken in accordance with Title 24 and the City's General Plan policies relating to energy savings. The application of these policies would ensure that the cumulative effect of this development on energy would be less than significant.

b. Cumulative Mitigation Measures. No mitigation measures would be necessary for cumulative energy impacts.

C. CONCLUSION

Implementation of the above identified transportation and circulation measures would reduce cumulative impacts on that topic; however, other cumulative transportation and circulation impacts would remain significant and unavoidable. The project would also contribute criteria pollutant emissions to cumulative air quality impacts. The project would also locate additional residential units in an area where noise levels exceed the City's standards.

VII. ALTERNATIVES

The *CEQA Guidelines* require analysis of a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the project's basic objectives and avoid or substantially lessen any of the significant effects of the project. The range of alternatives required in an EIR is governed by a "rule of reason" that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice.[1] The *Brandenburg Mixed Use Development Project* has been described and analyzed in the previous chapters with an emphasis on potentially significant impacts and recommended mitigation measures to avoid these impacts. The following discussion is intended to inform the public and decision-makers of the potentially feasible alternatives to the proposed project.

The objectives of the *Brandenburg Mixed Use Development Project* are an important part of the context for evaluating alternatives to the proposed project. The project's objectives are restated here for reference:

- Realign Julian Street to follow the historic rectangular grid street system, eliminating the one-way segment between Market Street and State Route 87;
- Assemble properties to facilitate development;
- Develop high density residential uses in and adjacent to the Downtown;
- Provide high quality residential development and adequate parking facilities in an underutilized area of Downtown San Jose; and
- Provide new open-public space with recreational facilities with the project boundaries.

This chapter discusses a total of five alternatives to the proposed Project:

The **No Development** alternative would involve the multi-parcel site remaining physically as it presently is. Structures on the site would remain in place and in use; parking lots would continue to be used. No new construction or expansion of pubic facilities would occur under this alternative. The proposal to realign Julian Street would not occur; traffic would continue to use the curving Julian Street segment as it traverses the site. Where onsite soils and groundwater contamination has led to remediation activities, those activities would continue in the near term to their current objective. Further remediation efforts would not be initiated.

The **Alternate Location** alternative evaluates the same development program as the proposed project, but at another location within the City of San Jose. In order to most clearly distinguish the trade-off in potential impacts—both *beneficial* and *adverse*—of an alternate location for the project, a single site of approximately the same size has been selected. That site is the 14.5-acre Fruitdale Station site analyzed in the EIR prepared for the *Neighborhood Business Clusters Redevelopment Area Forma-*

[1] *CEQA Guidelines*, 1998, Section 15126.6.

tion (February 2000). The Fruitdale Station site is located south of the Southwest Expressway and Fruitdale Avenue, and west of St. Elizabeth Drive.

The **Retail Mix** alternative takes the proposed project and adds the option of a 40,000 square foot urban market to the development program.

The **Office/Residential Mix** alternative evaluates a project that includes both office and residential uses, like the proposed project that was analyzed in the previous EIR on the West Julian Revitalization Project (including the Legacy Partners office and retail project) in 2001.

The **No Project** (existing General Plan and Zoning) alternative considers development that would be allowed under the existing General Plan land use designation and Zoning for the site.

Each alternative is compared to the proposed Project, and discussed in terms of its various mitigating or adverse effects on the environment. Analysis of the alternatives follows the same topical order as for the proposed Project in Chapter V, and focuses on those topics for which significant adverse impacts would result from the proposed Project.

A. NO DEVELOPMENT ALTERNATIVE

1. Description of No Development Alternative

The No Development alternative is the circumstance under which the project does not proceed, and the comparison involves the effects of the property remaining in its existing state versus the effects which would occur if the project were implemented. Structures on the site would remain in place and in use; parking lots would continue to be used. No new construction or expansion of pubic facilities would occur under this alternative. The proposal to realign Julian Street would not occur; traffic would continue to use the curving Julian Street segment as it traverses the site. Remediation of contaminated soils and groundwater on various parcels of the multi-parcel project site that is currently ongoing would continue in the near term to its short-term objective and then terminate. Further remediation efforts would not be initiated.

Please note that a No Project Alternative (existing General Plan and Zoning) is evaluated below in subsection E.

2. Analysis of No Development Alternative

To maintain the project site as it is today would avoid each of the three significant and unavoidable impacts that would result from the proposed project. The absence of new residential and retail development on the site would not lead to exacerbated level-of-service impacts at either of the two impacted intersections (Coleman Avenue/Hedding Street and Coleman Avenue/Taylor Street), nor would development here add to the congestion on the select segments of SR 87. Related to the avoidance of these traffic impacts, the No Development alternative would also avoid the contribution made by the proposed project to regional air pollution.

While this alternative would be environmentally superior in the technical sense that these aforementioned impacts would not occur, it would also fail to achieve any of the project's objectives summarized at the beginning of this chapter (and included in the City's General Plan for Downtown San Jose

and the adjacent San Jose International Airport). The creation of high quality, high density, residential development and adequate parking facilities in this underutilized area would be foregone, as would the new open-space proposed as part of the project. In addition, the realignment of Julian Street and reestablishment of the historic rectangular grid system would not be realized.

B. ALTERNATE LOCATION ALTERNATIVE

1. Description of Alternate Location Alternative

The **Alternate Location** alternative places the proposed project on the 3-parcel site that was proposed for the Fruitdale Station redevelopment cluster. The Alternate Location site is composed of the 14.5-acre Fruitdale Station site (as compared to,16 parcels totaling approximately 11.4 acres for the proposed project). It is located south of the Southwest Expressway and Fruitdale Avenue, and west of St. Elizabeth Drive. (As further context for understanding the relative environmental effects of relocating the proposed project to the Fruitdale Station site, that project envisioned 45,000 square feet of commercial uses and 954 residential units on the 12-acre K-Mart parcel of the Fruitdale Station site).

2. Analysis of Alternate Location Alternative

a. Land Use. Development of 1,501 residential units on the 14.5-acre Fruitdale Station site would exceed the current allowable density for the site. Also, building heights for the Neighborhood Business Clusters development there were assumed to be up to 90 feet in height, as compared with the 173-foot height of the proposed project. Unless the project could be reduced in scale to meet the current maximum density and the building heights reduced by several stories, the proposed project's residential and commercial land uses would not appear to be compatible with the existing medium and high density residential uses surrounding the site. Even though all new development would be subject to the City's design and land use regulations, it is unclear whether relocation of the proposed project to this site could be accomplished without creating significant land use compatibility impacts.

b. Transportation and Circulation. While no quantitative analysis of transportation and circulation impacts was carried out for the proposed project at the alternate location, the previous analysis of the Neighborhood Business Clusters development on this site can inform our understanding of the likely effects of this alternative. In the case of the Neighborhood Business Clusters development (954 units and 45,000 square feet of commercial uses versus 1,501 units and 60,000 square feet of commercial uses for the proposed project), one intersection (Meridian Avenue and Fruitdale Avenue) was forecast to operate at an unacceptable level of service with the Neighborhood Business Clusters development. No CMP intersections or segments would be affected. A relatively minor mitigation measure (addition of a left-turn pocket, which could be accomplished within the existing curb-to-curb width) would improve the intersection's LOS to an acceptable LOS D. The net effects of the Neighborhood Business Clusters development on other intersections was shown in that earlier EIR to range from non-existent in most cases to minimal in others. From those forecasts, we can conclude that even the additional development represented by the proposed project, at this alternate location, would not substantially worsen traffic congestion. Therefore, the alternate location would be environmentally superior to the proposed site in that the effects of development here would cause fewer intersections or roadway segments to operate at unacceptable levels of service.

c. Air Quality. Development of the proposed project at the alternate location would not lead to any different impacts on this topic than would its development at the proposed location. Emissions of

the regional pollutants, carbon monoxide and construction period dust would not change as a result of the project's relocation to the alternate site. Two of the three regional emissions would still exceed the BAAQMD thresholds of significance and would be unavoidable. Mitigation measures related to construction period dust that are recommended for the proposed project would be equally applicable and effective for this alternative.

d. Noise. No quantitative noise analysis was conducted for this alternative. The noise effects caused by construction and operation of the proposed project at this alternate location would be similar to those generated at the proposed site. However, the Fruitdale Station location is distinguishable from the proposed site in that this alternate location would not be subject to the same levels of noise generated by aircraft or by vehicular traffic travelling on State Route 87.

e. Shade and Shadow. Constructing buildings of up to 173 feet in height on the Fruitdale Station site would contrast greatly with existing surrounding land uses which are mostly one to two stories in height. While simulations of the shade and shadow effects of the proposed project relocated to the Fruitdale Station have not been prepared, they would be noticeable. These effects however, would mostly be experienced on private yards and not on public parks or open spaces.

f. Aesthetics. Development of 1,501 residential units in buildings of up to 173 feet in height would result in significant, unavoidable visual and aesthetic impacts at the alternate location. Similar to the land use impacts described above, the context of the alternate site is substantially more residential in character and low to medium in density than the proposed site. Imposing on this alternate location a project of the scale and density of the proposed project – even though its acreage (14.5 acres) is actually greater than the proposed site (11.4 acres) – would be only partly mitigated by architectural and design review by the City of San Jose.

g. Vegetation and Wildlife. The alternate location would be superior to the proposed site to the extent that it would not require the removal of the 22 ordinance-sized trees that are present at the proposed site. However, the replacement of those trees would offset by the City's replacement standards.

h. Geology. Construction and operation of the proposed project at the alternate location would not lead to any different impacts on this topic than would its development at the proposed location. Mitigation measures related to soils conditions and seismic hazards that are recommended for the proposed project would be equally applicable and effective for this alternative.

i. Cultural Resources. Construction and operation of the proposed project at the alternate location would not lead to any different impacts on this topic than would its development at the proposed location. Mitigation measures related to cultural resources that are recommended for the proposed project would be equally applicable and effective for this alternative.

j. Hazards and Hazardous Materials. Construction and operation of the proposed project at the alternate location would not lead to any different impacts on this topic than would its development at the proposed location. Investigation, evaluation and remediation of potential hazardous materials at the proposed project site have been initiated and will be completed prior to development of the site. In the case of this alternate location, some of that effort remains to be undertaken. Mitigation mea-

sures that are recommended for the proposed project would be of a similar scale to those that would be required at this alternate site and would be equally applicable and effective for this alternative.

k. Public Facilities and Services; Utilities and Service Systems; and Energy. Construction and operation of the proposed project at the alternate location would lead to impacts on public facilities and services, utilities, and energy of a similar nature to those that would result from the proposed project at its proposed location. At the proposed site downtown, police and fire response to emergency calls may be adversely affected as congestion in the downtown increases; such an effect would be less likely to occur at the Fruitdale Station site. On the other hand, other services, utilities and energy transmission and supply systems could be more efficiently supplied at a location like the downtown site.

l. Hydrology and Flooding. Based on the findings presented in the *Neighborhood Business Clusters Redevelopment Area Formation, Draft Environmental Impact Report* (February 2000), it would appear that the alternate location would present fewer challenges related to hydrology and flooding in the near term (before all of the Guadalupe River flood improvements are implemented). While this alternative would be somewhat superior in these terms, all significant adverse impacts that would result from development of the proposed project (at the proposed location downtown) could be mitigated to less than significant levels.

C. RETAIL MIX ALTERNATIVE

1. Description of Retail Mix Alternative

The **Retail Mix** alternative takes the proposed project and adds the option of a 40,000 square foot urban market to the development program. The urban market would be located on parcel L2 (see Figure III-4) which is bounded by Market, Devine and North San Pedro Streets on the east, south and west, respectively, and by parcel L1 on the north. Under this alternative, parcel L2 would continue to include the same 169 dwelling units as proposed. It would, however, include a total of 47,500 square feet of retail space (7,500 square feet as in the proposed project and the optional 40,000 square foot urban market). Total retail development under this alternative would be 107,500 square feet. Parking under this alternative would include a total of 403 spaces (including the proposed project's 253 spaces and an additional 150 spaces for the urban market).

2. Analysis of Retail Mix Alternative

a. Land Use. Introduction of an urban market of 40,000 square feet to the project site would not lead to any direct land use compatibility impacts. While such a store would be larger than any that currently exist in the immediate neighborhood, it would not be so large as to be disruptive or in conflict with existing retail or residential uses. Existing plans and policies that apply to the project site, would not preclude the addition of such a use or size of outlet. If recent residential growth in this portion of Downtown San Jose were to lead to proposals for such a use, its placement here could have a beneficial land use effect on the neighborhood, in terms of its own sense of place and cohesiveness.

b. Transportation and Circulation. The option of adding 40,000 square feet of retail space (urban market) would add a significant number of new vehicle trips to the roadways within the project study area. Regardless of the ratio of local area walk-in shoppers, an urban shopping center of this size would need to generate a sizable number of vehicular trips in order to operate at a profit.

The resulting increase in trips would exacerbate project related traffic impacts. The major adverse impact of this alternative would be the traffic that it would generate in the local area. While this alternative was not the subject of a detailed traffic analysis, one can see that it would lead to serious traffic congestion. Trip generation by the retail component alone of such an alternative (in which the total retail development in the project area was 100,000 square feet) would reach nearly 1,300 trips in the peak hour. Even if it were assumed that half those trips were made by walk-in shoppers from the local neighborhood, the results 650 trips would nearly reach the total of 760 peak hour trips generated by the entire residential portion (1,501 units) of the proposed project. Because the addition to local roadways of such an increase in peak hour trips would exacerbate the projected level of service impacts from the proposed project and possibly cause additional intersections or freeway segments to operate at unacceptable levels, further study will be needed. Such a volume of trips could also result in circulation and safety impacts within the project area itself, as the current plan for the reintroduction of the grid street pattern has not taken account of such additional retail space traffic levels.

c. Air Quality and Noise. Just as the introduction of the urban market would lead to a greater number of vehicular and truck trips to the project area under this alternative, so too would it increase both air pollutant emissions and noise in the area. To the extent that placing a market on parcel L2 would draw at least some of its customers from greater distances than would arrive on foot, the net new vehicular trips would increase the effect of both of these pollutants on the local area. As with any destination land use—be it retail, office, or civic—the effect would be most accurately characterized as having been *concentrated* rather than *created* by the specific use. On the other hand, an urban market at this location would provide a nearby outlet for the many recently arrived residents of the area as well as future residents of the proposed project and other nearby projects who would otherwise have to travel by auto to more distant similar markets.

d. Shade and Shadow, and Aesthetics. While no specific design for parcel L2 with the urban market in place has been prepared, it would—by definition—be a more dense and intense physical development than envisioned under the proposed project. This characteristic of the Retail Mix alternative would increase the likelihood of adverse shade and shadow impacts on nearby open space. However, it is not necessarily that case that any of the less than significant aesthetic effects of the proposed project would increase under such an alternative design.

e. Vegetation and Wildlife. Analysis of the proposed project assumes that all of the trees on parcel L2 would be removed. Intensification of the development program to include an urban market would not change this effect (which was deemed less than significant for the proposed project).

f. Geology; Cultural Resources; Hydrology and Flooding; Hazards and Hazardous Materials. Construction and operation of the urban market on parcel L2 would not lead to any different impacts on these topics than would the proposed project. Mitigation measures recommended for the proposed project would be equally applicable and effective for this alternative.

g. Public Facilities and Services; Utilities and Service Systems; and Energy. Construction and operation of the urban market would lead to a small, but less than significant, increase in the demand for each of these urban systems and resources. To the extent that infill development of the type represented by the proposed project would be further encouraged on other nearby properties by the presence in the neighborhood of an urban market, the overall effect of its inclusion here could be one of increased efficiency for each of these systems.

D. OFFICE/RESIDENTIAL MIX ALTERNATIVE

1. Description Of Office/Residential Mix Alternative

The **Office/Residential Mix** alternative includes both office and residential uses, of a type and scale like the proposed project that was analyzed in the previous EIR on the West Julian Revitalization Project (including the Legacy Partners office and retail project) in 2001. In addition to General Plan Amendments for land use changes and increased building heights up to 180 feet on three specific blocks, that project (hereafter referred to as the "Legacy Project") included basically the same roadway realignment of Julian Street. The development program analyzed in the previous EIR included 1.1 million square feet of office space, 12,000 square feet of ground floor commercial space, and up to 650 units of multi-family residential housing, and park uses.

2. Analysis of Office/Residential Mix Alternative

While the quantitative extent of the impacts of this alternative would vary slightly (among the various topical areas analyzed) from that of the proposed project, this alternative would lead to essentially the same outcome as the proposed project. Each development program would result in significant unavoidable impacts related to intersection LOS, freeway segment congestion, and regional air quality. Where distinctions can be drawn, they are discussed below.

a. Land Use. The proposed GPA for building heights of up to 180 feet would represent a slight increase in the effects related to this aspect of land use (light and glare, and shade and shadow). However, mitigation measures recommended for the proposed project would be equally applicable and effective for this alternative.

b. Transportation and Circulation. Traffic analysis conducted for the Legacy project found that traffic would exceed interchange capacity at the SR 87 northbound off-ramp at Julian Street and the southbound loop on-ramp to SR 87; the only mitigation for this condition would have been to add an additional lane to the northbound off-ramp (no mitigation was found for the southbound loop). Because such an additional lane would need to be built back onto the freeway itself, and because such extensive freeway improvements were considered beyond the scope of an individual project EIR, this impact was determined to be significant and unavoidable.

c. Air Quality. Quantitatively, this alternative would lead to greater project-related regional air emissions than would the proposed project. Whereas the BAAQMD standard for reactive organic gases, oxides of nitrogen, and particulates would be 80 pounds per day (for all three), the two projects (proposed and Legacy alternative, respectively) would lead to the following total daily emissions levels:

ROG:	195.7 versus 163.7
Nox:	279.3 versus 134.1
PM_{10}	94.2 versus 76.1

Given the 80 pounds per day BAAQMD standard, both the proposed project and the Office/Residential Mix alternative would both still lead to significant and unavoidable adverse regional air quality impacts.

d. Noise. While the spatial extent of increased noise from this alternative would differ somewhat from that of the proposed project, no essential significant differences would result. The effects in both cases would depend on the use or non-use of pile driving equipment, specific design characteristics and building materials, and the timing of construction versus occupancy.

e. Shade and Shadow, and Aesthetics. The shading effects and aesthetic compatibility of the Office/Residential Mix alternative with its neighbors would be somewhat more problematic than would be the case with the proposed project. Not only would the alternative be slightly taller (by up to 7 feet), it would include office buildings that might not fit in with the adjacent and nearby residential uses to quite as great and extent as would the proposed residential and ground floor retail structures.

g. Vegetation and Wildlife. Analysis of the proposed project assumes that all of the trees on parcel L2 would be removed. Development of the Office/Residential Mix alternative would not change this effect (which was deemed less than significant in the case of the proposed project).

h. Geology; Cultural Resources; Hydrology and Flooding; Hazards and Hazardous Materials. Construction and operation of the Office/Residential Mix alternative would not lead to any different impacts on these topics than would the proposed project. Mitigation measures recommended for the proposed project would be equally applicable and effective for this alternative.

g. Public Facilities and Services; Utilities and Service Systems; and Energy. Construction and operation of the Office/Residential Mix alternative would lead to a small, but less than significant, increase in the demand for each of these urban systems and resources when compared to the proposed project.

E. NO PROJECT ALTERNATIVE

1. Description of No Project Alternative

The **No Project** (existing General Plan and Zoning) alternative evaluates the impacts of the development that would be allowed under the existing General Plan land use designations and Zoning for the site.

2. Analysis of No Project Alternative

When compared to the proposed project, the No Project (existing General Plan and Zoning) alternative would be very similar. As shown in Figure III-3 (page 35), the existing General Plan designations found in the 16-parcel project area include General Commercial, Residential Support for the Core (25+ du/acre), and Core. As shown in Figure III-5 (page 37), the existing zoning for parcels in the area includes General Commercial, Light Industrial and Heavy Industrial uses. Development of essentially the same type and intensity could occur on these parcels in the absence of the proposed General Plan Amendments, Rezoning, tentative maps, and other approvals. The process by which development would be approved would be somewhat different, but such procedural changes would not in and of themselves lead to physical environmental impacts.

This alternative would have adverse impacts of roughly the same type and scale as those determined to result from the proposed project. This alternative would not eliminate any of the significant and unavoidable adverse impacts of the proposed project.

One effect of this alternative would be to remove the effect that the proposed project could have as a catalyst for development of parcels in the project area. Failure to accomplish the Julian Street realignment and to extend the Core designation across the project area would reduce the likelihood that the project area would be developed as a coherent neighborhood with high quality residential development, linked to the rest of the downtown to the south via the reestablished grid street system.

F. ENVIRONMENTALLY SUPERIOR ALTERNATIVE

Designation of the environmentally superior alternative can be a complicated task for an in-fill project, proposed for development on an historically urbanized site, in a redevelopment area. The complications revolve around the very definitions of "impacts" as well as the likelihood that some impacts would occur (or continue to occur if they are already present either in the existing condition or are forecast to occur under baseline future conditions) with or without the proposed project and alternatives that involve any development. Such is the case with the Brandenburg Mixed Use/North San Pedro Housing Sites project.

The No Development alternative is considered the environmentally superior alternative in the strict sense that environmental impacts associated with its implementation would be the least of all the scenarios examined (including the proposed project).

To maintain the project site as it is today would avoid each of the significant and unavoidable impacts that would result from the proposed project. The absence of new residential and retail development on the site would not lead to exacerbated level-of-service impacts at impacted intersections, nor would development here add to the congestion on the select segments of SR 87. Related to the avoidance of these traffic impacts, the No Development alternative would avoid the contribution made by the proposed project to regional air pollution. The underlying conditions facing those intersections, roadway segments, and air quality, however, would not be changed in more than a very minor way by the absence of the proposed project. It is also important to note that while this alternative would be environmentally superior in the technical sense that contribution to these aforementioned impacts would not occur, the No Development alternative would also fail to achieve any of the project's objectives. The creation of high quality, high density, residential development and adequate parking facilities in this underutilized area would be foregone, as would the new open-space proposed as part of the project. In addition, the realignment of Julian Street and reestablishment of the historic rectangular grid system would not be realized.

In cases like this where the No Development alternative is the environmentally superior alternative, CEQA requires that the second most environmentally superior alternative be identified. Comparison of the environmental impacts associated with each alternative as described above, indicates that each of the other "build" alternatives (i.e., Alternate Location, Retail Mix, and Office/Residential Mix) would lead to a complex mix of impacts that would be greater and/or lesser than the proposed project, depending on the topic. For example, the Alternate Location alternative could lead to lesser traffic and vegetation impacts, but potentially more noticeable shade/shadow and aesthetics impacts, depending on project design; without detailed quantitative analyses of these effects, it cannot be

known whether they would cross the thresholds of significance set by the City of San Jose and thus be significant and unavoidable. As another example, the Retail Mix alternative would be similar to the proposed project, but would probably lead to measurably higher intersection LOS impacts.

It is the conclusion of this EIR that in the strict sense of numbers of impacts and severity of impacts, the Alternate Location alternative would be the environmentally superior alternative. However, the distinctions that can be drawn between that alternative and the proposed project are relatively small and, for that reason, not entirely clear without a more detailed analysis of the Alternate Location. It is important to note that while this alternative could be environmentally superior in the technical sense that contribution to these aforementioned impacts would not occur, the Alternate Location alternative would fail to achieve any of the project's objectives. The creation of high quality, high density, residential development and adequate parking facilities in this underutilized area would be foregone, as would the new open-space proposed as part of the project. In addition, the realignment of Julian Street and reestablishment of the historic rectangular grid system would not be realized.

VIII. SIGNIFICANT EFFECTS WHICH CANNOT BE AVOIDED

As discussed in Chapter V of this EIR, implementation of the *Brandenburg Mixed Use Project* would result in the following significant unavoidable adverse impacts:

- Significant traffic level of service (LOS) impacts at the intersections of Coleman Avenue/ Hedding Street and Coleman Avenue/Taylor Street;
- Significant traffic impacts to two freeway segments of State Route 87; and
- Significant contributions to regional air pollution in the near term.

The project in conjunction with other foreseeable projects would also result in significant unavoidable cumulative impacts to transportation and circulation, air quality, and noise.

IX. GROWTH-INDUCING IMPACTS

A project is considered growth-inducing if it would: directly or indirectly foster economic or population growth or the construction of additional housing; if it would remove obstacles to population growth or tax community service facilities to the extent that the construction of new facilities would be necessary; or if it would encourage or facilitate other activities that cause significant environmental effects.[1]

The project site is located within the City and would not result in an expansion of urban services or the pressure to expand beyond the City's existing Sphere of Influence. The proposed project would result in direct population growth as described in Chapter III. It would also result in employment growth in the retail outlets that are part of the project and by promoting indirect retail and business development in the neighborhood through purchases by the project's residents. However, the scale of population growth, and the direct and indirect commercial development, would not constitute significant or adverse growth inducement. Additionally, as discussed in Chapter IV, Consistency with Plans and Policies, the proposed project is generally consistent with the *San Jose 2020 General Plan* (*General Plan*) and the *Julian Stockton Redevelopment Plan*; as a result, it would not cause further growth beyond what is anticipated in the *General Plan*. It would not open additional undeveloped land to future growth or provide expanded utility capacity that would be available to serve future development. Instead, it would facilitate the reuse of underutilized land in an existing urban setting that is conveniently served by transit facilities and services.

[1] *CEQA Guidelines*, 2000, Section 15126.2(d).

X. SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES

An EIR must identify any significant irreversible environmental changes that would be caused by the proposed project being analyzed. Irreversible environmental changes may include current or future commitments to the use of non-renewable resources, or secondary or growth-inducing impacts that commit future generations to similar uses. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified.[1] The *CEQA Guidelines* describe three categories of significant irreversible changes that should be considered, as further detailed below.

A. CHANGES IN LAND USE WHICH WOULD COMMIT FUTURE GENERATIONS

As described throughout this EIR, the *Brandenburg Mixed Use Project* would allow for redevelopment of an historically underutilized area. This increased development would occur as infill redevelopment of urbanized parcels that have been previously developed and would not commit future generations to changes in land use which would constitute a substantial change. The project would also result in realignment of certain streets and rights-of-way and the construction of public infrastructure. However, these changes in circulation or infrastructure would represent an economic investment, but would not result in substantial changes in land use which would commit future generations.

B. IRREVERSIBLE CHANGES FROM ENVIRONMENTAL ACTIONS

Irreversible changes to the physical environment could occur from accidental release of hazardous materials associated with development. However, compliance with hazardous materials regulations and policies, and the remediation of existing conditions within the project site, as outlined in Chapter IV-J, Hazards, are expected to maintain this potential impact at a less-than-significant level.

C. CONSUMPTION OF NONRENEWABLE RESOURCES

Consumption of nonrenewable resources includes increased energy consumption, conversion of agricultural lands to urban uses, and lost access to mineral reserves. No agricultural lands would be converted and no access to mining reserves would be lost with construction of the *Brandenburg Mixed Use Project*. The project would redevelop underutilized parcels and construct public infrastructure. While this would require additional energy of several types for construction and for on-going use, it would not require the construction of major new lines to deliver energy, and service providers anticipate being able to provide the capacity to serve these levels of development. Furthermore, to the extent that growth throughout San Jose is partly an expression of regional demand, the redevelopment of existing neighborhoods would represent a more efficient allocation of non-renewable resources than would some other types or patterns of growth.

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[1] *CEQA Guidelines*, 2000, Section 15126.2(c)

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A. REFERENCES

Written and On-Line Resources

Azure Environmental, 2003. *Remedial Action Completion Report, 153 West Julian Street, San Jose, California*. June.

Association of Bay Area Governments (ABAG), 1999. Regional Housing Needs 1999-2006 Allocation. March 15.

ABAG, 1998. *Projections 2000: Forecasts for the San Francisco Bay Area to the Year 2020.* December.

Bay Area Air Quality Management District (BAAQMD), 2000. *Bay Area Attainment Status as of January 2003.*

BAAQMD, 2001. *Toxic Air Contaminant Control Program, Annual Report 2000.*

BAAQMD, 2000. *Bay Area 2000 Clean Air Plan and Triennial Assessment.*

BAAQMD, 2000. Major Criteria Pollutants.

BAAQMD, 1999. *Draft San Francisco Bay Area Ozone Attainment Plan for the 1-Hour National Ozone Standard*. March.

BAAQMD, 1996. *BAAQMD CEQA Guidelines.*

Beliharz, Edwin A. and Donald O. DeMers, Jr., 1980. *San Jose, California's First City.* The American Portrait Series, Continental Heritage Press, Inc., Tulsa, Oklahoma.

Bennyhoff, James A. and David A. Fredrickson, 1994. "A Proposed Integrative Taxonomic System for Central California Archaeology." In *Toward A New Taxonomic Framework for Central California Archaeology: Essays by James A. Bennyhoff and David A. Fredrickson.* Edited by R.A. Hughes, pp. 15-24, vol. 52. Contributions of the University of California Archaeological Research Facility, Berkeley, California.

Bergthold, Judith C., 1982. *Prehistoric Settlement and Trade Models in the Santa Clara Valley, California*. Masters Thesis, San Francisco State University.

Broadbent, Sylvia M., 1972. "The Rumson of Monterey: An Ethnography from Historical Sources." Contributions of the University of California Archaeological Research Facility.

Butler, Phyllis Filiberti, 1981. *The Valley of Santa Clara: Historic Buildings, 1792-1920.* Second Edition.

California, State of, Air Resources Board (CARB), 2003. Air Quality Monitoring Data, 1998-2002. Website: www.arb.ca.gov.

CARB, 2003. *Ambient Air Quality Standards.*

CARB, 2003. *Aerometric Data Analysis and Management System (ADAM).*

California, State of, Department of Education, Educational Demographics Unit, 2001. 2000-2001 Student Enrollment and Pupil/Teacher Ratio Statistics. Website: www.cde.ca.gov.

California, State of, Department of Housing and Community Development, 1999. *California's Housing Markets: 1990-1997, Statewide Housing Plan Update Phase II.* January.

California, State of, Department of Parks and Recreation, Office of Historic Preservation, 2000. *Directory of Properties in the Historic Property Data File.* August 28.

California, State of, Department of Parks and Recreation, Office of Historic Preservation, 1999. *Mills Act Property Tax Abatement Program.* Technical Assistance Series #12.

California, State of, Department of Parks and Recreation, Office of Historic Preservation, 1992. *Points of Historical Interest.*

California, State of, Department of Parks and Recreation, Office of Historic Preservation, 1990. *California Historical Landmarks.*

California, State of, Department of Parks and Recreation, Office of Historic Preservation, 1988. *Five Views: An Ethnic Historic Sites Survey for California.*

California, State of, Department of Parks and Recreation, 1976. *California Inventory of Historic Resources.*

Corbett, Michael R., 1998. *Building California: Technology and the Landscape.* California Historical Society, San Francisco, California.

Dill Design Group, 2000. *Historic Resources survey-Downtown San Jose Year 2000.*

Dill Design Group, 2002. *Historical and Architectural Evaluation for a Commercial Structure at 340 North San Pedro Street, San Jose, California, Santa Clara.*

Federal Transit Administration and Santa Clara Valley Transportation Authority, 2000. *Final EIS/EIR: Vasona Corridor Light Rail Transit Project.* March.

Fredrickson, David, 1974. "Cultural Diversity in Early California: A View From the North Coast Ranges." *Journal of California Anthropology.*

Garaventa, Donna M., Stuart A. Guedon, and Colin I. Busby, 1993. *Cultural Resources Review for the City of San Jose 2020 General Plan Update, Santa Clara County, California*. Basin Research Associates, Inc., San Leandro, California. Prepared for David J. Powers & Associates, Inc., San Jose, California.

Gudde, Erwin, G., 1998. *California Place Names: The Origin and Etymology of Current Geographical Names*. 4th Edition. University of California Press, Berkeley.

Hamilton, Joan O'C., 1997. "The Engineer Who Jump-Started Silicon Valley." *Business Week* Internet Edition: www.businessweek.com/1997/34/b354116.htm.

Harrington, J. P., 1933. Report of Fieldwork. *Annual Report of the Bureau of American Ethnology for the Years 1931-1932.*

Heizer, R. F. and Albert B. Elsasser, 1980. *The Natural World of the California Indians*. California Natural History Guides 46, University of California Press, Berkeley.

Hill, Ward, 2001. *West Julian Street Revitalization Plan, City of San Jose, Review and Analysis of Built Environment, Letter Report.* Ward Hill, Architectural History/Historic Preservation, San Francisco, California.

Historic Buildings of Santa Clara Valley Website: www.geocities.com/SoHo/Veranda/4103/.

Hoover, Mildred Brooke, Hero Eugene Rensch, Ethel Rensch, and William N. Abeloe, 1990. *Historic Spots in California*. Fourth Edition. Revised by Douglas E. Kyle. Stanford University Press, Stanford, California.

Levy, Richard, 1978. "Costanoan." In *Handbook of North American Indians, Volume 8:* California. Edited by R. F. Heizer, pp. 485-495. Smithsonian Institution, Washington, D.C.

Margolin, Malcolm, 1978. *The Ohlone Way: Indian Life in the San Francisco-Monterey Bay Area.*

Marriott, Paul Daniel, 1998. *Saving Historic Roads: Design and Policy Guidelines.*

Moratto, Michael J., 1984. *California Archaeology*. Academic Press, Orlando, Florida.

Peyton, Wes, 1989. *San Jose: A Personal View*. San Jose Historical Museum Association, San Jose, California.

RWQCB, 2002c. Closure letter for property located at 185 West Julian Street, San Jose, Santa Clara County, California. March 27.

RWQCB, 2002d. Closure letter for property located at 330 Terraine Street, San Jose, Santa Clara County, California. April 30.

RWQCB, 2002e. Correction Action Plans – 355 North San Pedro Street and 206 Bassett Street, San Jose, Santa Clara County, California. February 6.

Rolle, Andrew, 1987. *California: A History.* Fourth Edition.

Roop, William, 1992. *Appendix 2: A Cultural Resource Evaluation for the Downtown San Jose Strategy Plan Environmental Impact Report.* Archaeological Resource Services, Petaluma, California

San Jose, City of, 2003. *Historic Resources Inventory.* www.ci.san-jose.ca.us/planning/sjplan/Historic_resources.pdf.

San Jose, City of, 2001. *Strategy 2000: San Jose Greater Downtown Strategy for Development.* Prepared by Field Paoli and SMWM for San Jose Redevelopment Agency and Development Strategy Task Force. February.

San Jose @ A Glance, August 2003. Website: www.ci.san-jose.ca.us./about.html

San Jose, City of, 2000. *Preliminary Plan for the Proposed Strong Neighborhoods Initiative Redevelopment Project Area.* San Jose Redevelopment Agency.

San Jose, City of, 2000. Downtown San Jose: Compilation of Demographics, Facts and Articles Related to the City of San Jose. San Jose Redevelopment Agency.

San Jose, City of, 2000. *Draft EIR: Housing Opportunities Study, General Plan Amendments, Phase I - Volume I, II, and III.* December.

San Jose, City of, 2000. *Greater Downtown Strategy for Development.* Prepared by Field Paoli and SMWM for San Jose Redevelopment Agency and Development Strategy Task Force. December.

San Jose, City of, 2001a. *Draft Environmental Impact Report West Julian Revitalization Project, Volume I.* City of San Jose Redevelopment Agency, San Jose, California.

San Jose, City of, 2001b. *Draft Environmental Impact Report West Julian Revitalization Project, Volume II, Technical Appendices.* City of San Jose Redevelopment Agency, San Jose, California.

San Jose, City of, 1999. *Focus on the Future: San Jose 2020 General Plan.* December 7.

San Jose, City of, 1999. *Riparian Corridor Policy Study.*

San Jose, City of, 1997. *Zoning Ordinance, Title 20 of the San Jose Municipal Code.*

San Jose, City of, 1994. *Focus on the Future: San Jose 2020 General Plan.* August 16

San Jose, City of, 1994. *San Jose 2020 General Plan: Final EIR (Revised) Volume I and II.* July.

San Jose, City of, 1992. *Midtown Specific Plan, Final Environmental Impact Report.* November

San Jose, City of, 1992. *Midtown Specific Plan.* December.

San Jose, City of, 1992. *Final Environmental Impact Report on the Downtown Strategy Plan in San Jose, California. SCH #91093009, pp #92-17-170.* The Redevelopment Agency of the City of San Jose, San Jose, California.

San Jose, City of, 1991. *Land Use Plan for Areas Surrounding Santa Clara County Airports.*

San Jose, City of, Department of City Planning and Building, 1995. *What is Historic Preservation?*

San Jose, City of, Department of City Planning, 1990. *Commercial Design Guidelines.* May.

San Jose, City of, Department of City Planning, 1989. *St. James Square Historic District Design Guidelines.* June.

San Jose, City of, Department of Housing, 2003. Website: www.sjhousing.org.

San Jose, City of, Department of Housing, 2000. *2000-2005 Consolidated Plan* (Draft).

San Jose, City of, Department of Parks, Recreation, and Neighborhood Services, 2001. Website: www.ci.san-jose.ca.us/prns/centers.htmn.

San Jose, City of, Department of Parks, Recreation, and Neighborhood Services, 2000. *City of San Jose Greeenprint for Parks, Community Facilities, and Programs. A Draft 20-Year Strategic Plan.* September

San Jose, City of, Department of Planning, Building and Code Enforcement, 2003. *Historic Preservation Permit Process.*

San Jose, City of, Department of Planning, Building and Code Enforcement, 2000a. *Incentives for Ownership of a Designated City Landmark.*

San Jose, City of, Department of Planning, Building and Code Enforcement, 2000b. *What is a Designated City Landmark?*

San Jose Police Department, 2001. Crime statistics for annual year 2002. Website: www.sjpd.org.

San Jose Public Library, 2000. *Branch Facilities Master Plan.* September

Santa Clara Valley Water District, 1999. *Integrated Water Resources Plan.* June.

Silicon Valley Association of Realtors Website: www.siliconvalley-realtors.org.

Transportation Research Board, 1985. *Highway Capacity Manual, Special Report 209.*

Urban Programmers, 1999a. *Cultural Resources Evaluation West Julian Street General Plan Amendment.*

Urban Programmers, 1999b. *Cultural Resources Evaluation West Julian Street/Devine Street Study Area.*

U.S. Census Bureau, 2000. *Census 2000.*

U.S. Department of the Interior, National Park Service, 1998. *National Register Bulletin: How to Apply the National Register Criteria for Evaluation.*

U.S. Department of the Interior, National Park Service, undated. *National Register Bulletin 26: Certified Local Governments in the National Historic Preservation Program.*

Urban Land Institute, 2000. *Downtown San Jose, California: An Advisory Services Panel Report.* June 4-9.

Valley Transit Authority, 1999. *VTA Annual Route Evaluation Report - Fiscal Year 1998/1999.*

Communications

Angeles, Maria. City of San Jose, personal communication

Davidson, Charles. Written communication

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